
Addendum

To the North San Jose Development Policies Update
Program EIR

Prepared for:
PDC06-085
90 Archer Street
San Jose, CA

APRIL 2007

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I. PURPOSE OF ADDENDUM

The Final Program Environmental Impact Report for the North San Jose Development Policy Update was certified on June 21, 2005 (EIR Resolution No. 72768). The Program EIR evaluated impacts of the ultimate build out of 26.7 million square feet of industrial/office/R&D square footage and 32,000 new residential units within the Rincon De Los Esteros Redevelopment Area. The purpose of this Addendum is to evaluate the environmental effects of a specific "Project" (42 residential units) that is within the ultimate build out scenario defined by the North San Jose Development Policy EIR. The proposed project is further described in Section II, below.

This addendum is prepared pursuant to CEQA Guidelines section 15164, which states: "A lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

CEQA Guidelines Section 15162 sets the following criteria for the preparation of a supplemental EIR. Therefore, if an addendum to an EIR will be prepared, none of these criteria may be met. A subsequent portion of this document describes how the project does not meet these criteria.

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declarations;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

II. PROJECT LOCATION & DESCRIPTION

The project is located at the southwest corner of Archer Street and Kerley Avenue. The project site is located within the Rincon South Planned Community and the North San Jose Development Policies Update Area. The site is designated as Transit Corridor Residential (25-65 du/ac) on the San

Jose General Plan Land Use/Transportation Diagram and has been designated as such since 1998. The North San Jose Development Policy maintains the existing residential designation at the site.

The project site is surrounded by developed parcels. A small commercial building and parking lot occupy the 0.65 acre site. The site is surrounded by residential apartments to the north, a hotel and the hotel parking lot to the south and west, and commercial uses to the east. The site is located within 500 feet of the Gish Street Light Rail station, consistent with the Transit Corridor Residential land use designation.

The proposed project is a podium residential structure with four stories of residential above one level of below grade parking. A total of 42 residential units are proposed. The project proposes a building with a contemporary style of architecture at maximum height of 65 feet. Each unit will have private open space in the form of a deck or patio/porch area. The front facing porch areas open to the street with stairs and stoops to the public sidewalks. Landscaping will be planted on the proposed podium structure and around the perimeter of the structure.

III. DESCRIPTION OF THE PREVIOUSLY APPROVED PROJECT

The previously approved "Project" consists of the build out of the North San Jose Development Policy Update Area, which is projected to include the construction of approximately the ultimate build out of 26.7 million square feet of industrial/office/R&D square footage and 32,000 new residential units within the plan area. The 90 Archer Street project site is located within the area covered by the Program EIR. The number of units proposed (42 units) is within the total number of residential units (32,000) contemplated within North San Jose Development Policy Update Program EIR. The existing residential land use was discussed and analyzed at the site under the Program EIR.

The original North San Jose Development Policy Update was specifically adopted for the purpose of allowing ongoing residential, industrial, and office development in the North San Jose Area. Because the North San Jose Development Policy Update Program EIR contemplated residential uses at the proposed project site, an addendum has been prepared for adoption by the City to provide environmental clearance for the proposed 42 unit project.

IV. PROPOSED CHANGES TO THE PROJECT

The project consists of a PD Rezoning at 90 Archer Street to allow for the ultimate construction of 42 of the 32,000 residential units contemplated under the North San Jose Development Policies Update Program EIR. This addendum analyzes the site specific impacts of the proposed project. See Attachment A for a comparison of the environmental impacts of the proposed project to the originally contemplated project.

V. ENVIRONMENTAL IMPACTS OF PROPOSED CHANGES TO THE PROJECT

See Attachment A for a comparison of the environmental impacts of the proposed project to the originally contemplated project.

VI. CONCLUSION & REQUIRED FINDINGS

Pursuant to CEQA Guidelines Section 15164(e), the following discussion details are required: 1) the proposed 42 unit residential project was considered under the original scope of the North San Jose Development Policy Program EIR; 2) there are less-than-significant environmental impacts associated with this Project; and 3) the proposed project (and associated environmental effects) does not meet the conditions described in Section 15162 calling for preparation of a subsequent EIR.

The following discussion summarizes the reasons why a subsequent EIR, pursuant to CEQA Guidelines section 15162, is not required to evaluate the environmental effects of the proposed Project.

Substantial Changes to the Project. As described above, the proposed project is the type of activity that is anticipated as part of the North San Jose Development Policy Update Program EIR. The EIR includes an analysis of the substantial physical development that will occur in the North San Jose area. The proposed project is consistent with the key objectives of the North San Jose Development Policy, which seek to promote the location of high density residential development near transit lines and job centers. Therefore, the proposed project is not considered a "substantial change" under the Program EIR. The project constitutes a minor residential development project anticipated under the Program EIR.

As detailed in the previous section, the project would not result in significant environmental effects or increase the severity of environmental impacts already identified in the Final Program EIR. Adverse impacts resulting from the project would be reduced to less-than-significant levels through the implementation of existing policies and mitigation measures described in the Final EIR. Less-than-significant environmental impacts of the Project would not require major revisions to the Final Program EIR.

Project Circumstances. Since certification of the Final North San Jose Development Policy Update Program EIR, conditions in North San Jose have not changed such that implementation of the project would result in new significant environmental effects or a substantial increase in the severity of environmental effects already identified in the Final EIR. Therefore, changes in the physical conditions of the project site are not expected to result in substantial adverse environmental impacts not addressed in the Final Program EIR.

New Information. No new information of substantial importance has been identified in regard to the Project or to the Project site such that the Project would be expected to result in: 1) significant environmental effects not identified in the Final EIR; or 2) more severe environmental effects than shown in the Final EIR, or would require mitigation measures which were previously determined not to be feasible, or mitigation measures which are considerably different from those recommended in the Final EIR. Substantial new information could include but is not limited to new data on soil or groundwater contamination, traffic conditions, and local air quality such that the environmental impacts identified in the Final EIR would be made substantially more severe. No such new information has been identified since publication and certification of the Final Program EIR. As described previously, the Project would not result in significant new environmental effects. Existing regulations (including City General Plan policies and ordinances in the Municipal Code) and mitigation measures included in the Final Program EIR would be adequate to reduce the impacts resulting from implementation of the Project to less-than-significant levels.

Based on the analysis in this addendum, the City concludes that the Final Program EIR adequately addresses the environmental effects of the Project, and that the proposed 42 unit residential project is a part of the 32,000 units that the Program EIR analyzed. Furthermore, the City finds that this minor


project would not result in significant environmental effects not already identified in the Final Program EIR.


BY:

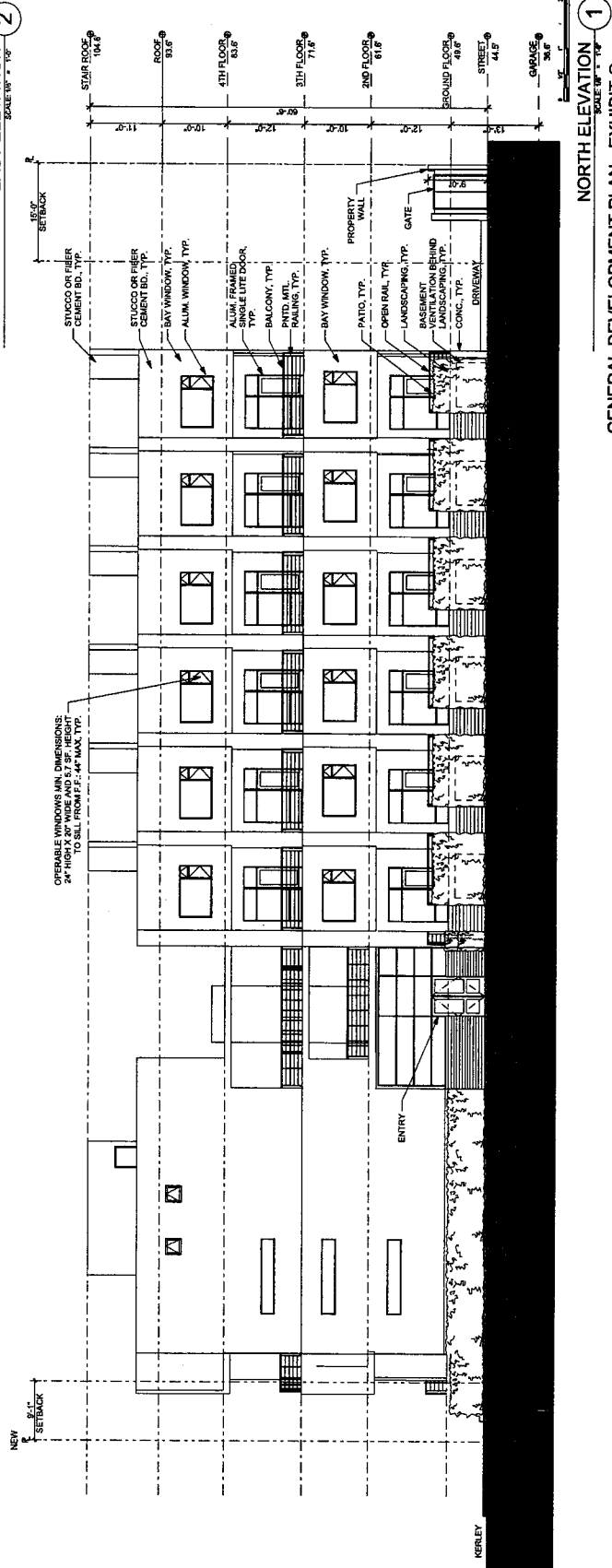
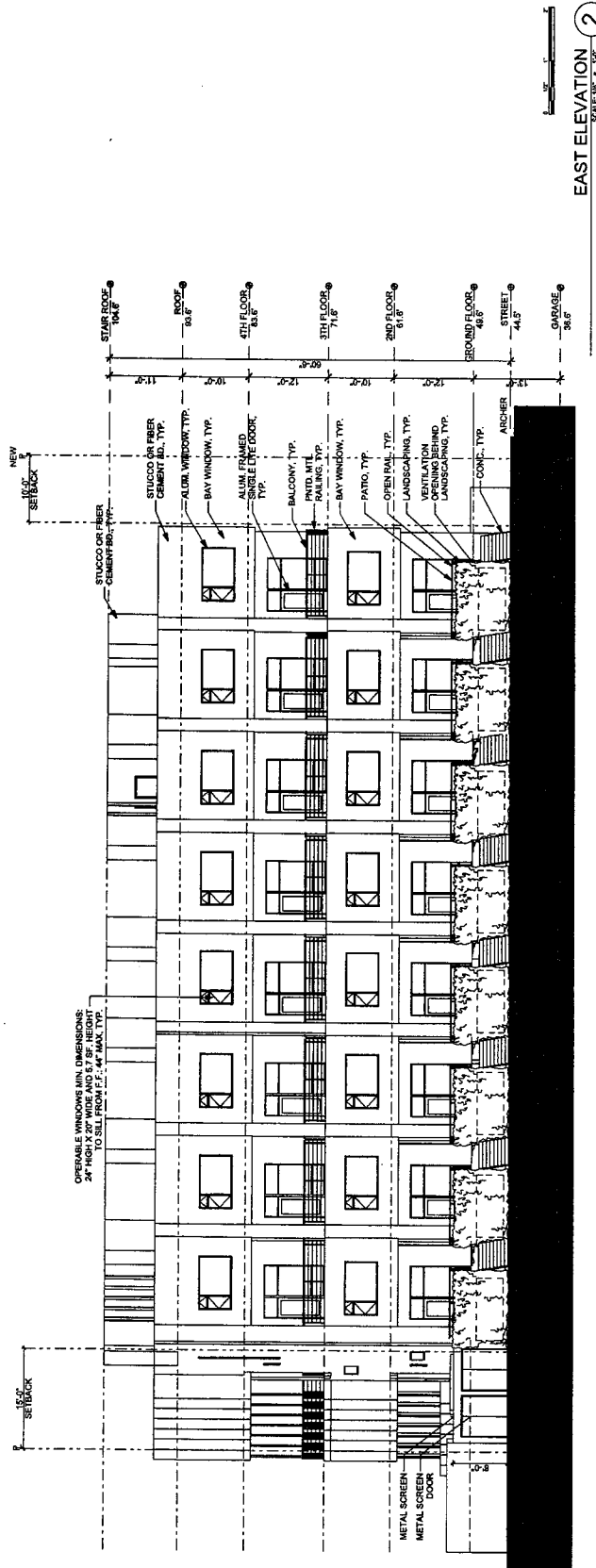
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Project Manager



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Planning, Building and Code Enforcement


Deputy


Date



ATTACHMENT A **PRELIMINARY ENVIRONMENTAL CHECKLIST**

Introduction and Purpose

The California Environmental Quality Act (CEQA) recognizes that between the date projects are approved and the date construction is completed, one or more of the following changes may occur: 1) the scope of the project may change; 2) the environmental setting in which the project is located may change; 3) certain environmental laws, regulations or policies may change; and 4) previously unknown information can arise. In the event that one of more of these changes occurs, CEQA requires that Lead Agencies evaluate these changes to determine whether or not there would be any changes in environmental impacts or required mitigation measures. CEQA allows Lead Agencies to prepare an Addendum to an adopted Mitigated Negative Declaration (MND) or certified Environmental Impact Report (EIR) when it can be demonstrated that changes to a project, and the environmental impacts from such changes, are minor when compared to the original scope of the project and the original environmental impacts. If the changes are significant, further environmental review (e.g., a Supplemental EIR or a new EIR) would be warranted.

This environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, was used to compare the environmental impacts of the "Proposed Project" with those of the "Approved Project" and to identify whether the Proposed Project would likely result in new significant environmental impacts. The right-hand column in the checklist lists the source(s) for the answer to each question, and where appropriate, the location of the required mitigation measures.

Preliminary Checklist of Environmental Issues

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
AESTHETICS Would the project:						
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,18,24
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,18,24
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,18,24
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,18,24

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
AGRICULTURAL RESOURCES						
Would the project:						
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4,19,24
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4,19,24
3) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4,10,25
AIR QUALITY						
Would the project:						
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,3,9,29
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,3,9,29
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,3,9,29
4) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,3,9,29
5) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,3,9,29

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
BIOLOGICAL RESOURCES						
Would the project:						
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,24,29
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,24,29
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,24,29
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,24,29
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6,9,24
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,24,29

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
CULTURAL RESOURCES						
Would the project:						
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19,29
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19,29
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19,29
4) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19,25
GEOLOGY AND SOILS						
Would the project:						
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:						
a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20
b) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20
c) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20
d) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20
2) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20

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4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12,20
HAZARDS AND HAZARDOUS MATERIALS						
Would the project:						
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27,28
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27,28, 32-36
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26,27,28, 32-36
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27,28
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27,28

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24,25
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,25
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,25
HYDROLOGY AND WATER QUALITY						
Would the project:						
1) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11,13,15, 18
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11,13,15, 18
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11,13,15, 18
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11,13,15, 18

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11,13,15, 18
6) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11,13,15, 18
7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,16
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,16
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,16
10) Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11,13,15, 18
LAND USE						
Would the project:						
1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,5,18
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,18
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,18

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
MINERAL RESOURCES						
Would the project:						
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,12
2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,12
NOISE						
Would the project result in:						
1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,31
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,31
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,31
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,31
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,31
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,31

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
POPULATION AND HOUSING						
Would the project:						
1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9,15,24
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9,15,24
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15,24
PUBLIC SERVICES						
Would the project:						
1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:						
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,26
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,26
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,26
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,26,17 9,26
RECREATION						
Would the project:						
1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,26,17

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17
TRANSPORTATION/TRAFFIC Would the project:						
1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18,29
2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,18,29
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22,24,29
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18
5) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18
6) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15,24
7) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,15
UTILITIES AND SERVICE SYSTEMS Would the project:						
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7,13

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7,13,31
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7,13,31
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,13
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9
7) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7,13
MANDATORY FINDINGS OF SIGNIFICANCE						
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6,9,24,25,29

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,24,29
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,24,29
4) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9,29

JUSTIFICATION DISCUSSION FOR CHECKLIST

AESTHETICS

1) The project site is located in a developed area containing a mix of commercial and residential and industrial uses. The project site currently contains an industrial/office building, a parking lot, and associated landscaping. There are no designated scenic vistas on or near the project site. Conversion of the site to residential use would not therefore result in any impacts to scenic vistas.

2) The project site does not contain any designated scenic resources consistent with the Scenic Routes Goal and Policies contained in the San Jose 2020 General Plan, nor is it located near a state scenic highway. None of the trees on the project site are designated scenic resources by the General Plan, and they are not included on the City's list of Heritage Trees. The proposed project site does not contain any historic buildings or structures. Therefore, no impacts on the project site would occur as a result of the proposed project.

3) The proposed Planned Development (PD) Zoning would allow the construction of up to 42 attached dwelling units. Although the future new development would change the existing visual character of site, it would not be considered degrading given the scale, age and condition of the existing structures and landscaping on the site. Conformance with the City's Residential Design Guidelines would ensure compatibility with existing residential and hotel uses on immediately surrounding properties. Less than significant impacts to the visual character or quality of the site and surroundings would result from implementation of the project.

4) The proposed project is consistent with the Transit Corridor Residential General Plan designation for the site. The proposed PD Zoning would change the zoning from (CG) Commercial General to A(PD), a Planned Development Zoning District, allowing a Medium-High Density residential use. The proposed new residential development would result in a minor increase in building mass on the site. The potential increases in light and glare resulting from the buildings would be mitigated by the installation of new landscaping, building articulation, garage parking of vehicles, etc. Exterior building lighting associated with

the new development would likely create a minor increase in the amount of nighttime lighting than the existing land use on the site, however it would not adversely affect views in the area. The project would be required to conform to the City's Residential Design Guidelines and to the standards of the City's Outdoor Lighting Policy. Therefore, less than significant impacts would occur as a result of the project.

During the construction of these new residential units, short-term visual impacts will be caused by grading operations, construction debris, and trash accumulation on the site. Completion of project improvements, including the installation of landscaping, would eliminate short-term visual impacts of the grading and construction impacts.

CONCLUSION. Implementation of the proposed rezoning, in conformance with the City's Residential Design Guidelines, and Outdoor Lighting Policy, would not result in significant aesthetic impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project)**

AGRICULTURAL RESOURCES

1) The Santa Clara County Important Farmland Map, prepared by the California Department of Conservation and the USDA Soil Conservation Service, classifies land in seven categories in order of significance: 1) Prime Farmland; 2) Farmland of Statewide Importance; 3) Unique Farmland; 4) Farmland of Local Importance; 5) Grazing Land; 6) Urban and Built-Up Land; and 7) Other Land. The project site is classified as Urban and Built-Up Land and is surrounded by urban lands and is not located near any agricultural resources. Therefore, no impacts would occur as a result of the project.

2) The California Land Conservation Act ("Williamson Act") was enacted to help preserve agricultural and open space lands via a contract between the property owner and the local jurisdiction. The project site is not General Plan designated nor is it zoned for agricultural uses, and is not under a Williamson Act contract. Therefore, the impact is considered to be less than significant.

3) The proposed project does not include any changes in the existing environment that could result in the conversion of prime farmland to non-agricultural uses. Therefore, less than significant impacts would occur as result of the project.

CONCLUSION. Implementation of the proposed rezoning would not result in significant farmland impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project)**

AIR QUALITY

1) The project site is located within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The Bay Area Air Quality Management District (*BAAQMD CEQA Guidelines* (Revised December 1999) state that cumulative air quality impacts would not result if a project is consistent with the most recently adopted Clean Air Plan (CAP), which is the *Bay Area 2000 Clean Air Plan* prepared by the BAAQMD and adopted December 20, 2000. The City's General Plan has implemented the control measures contained in the CAP. Since the project is consistent with the policies and programs of the General Plan (see discussion under Air Quality Checklist Item #2, below), and the General Plan is consistent with the Clean Air Plan, the project would not conflict with or obstruct implementation of the CAP. Therefore, less than significant impacts would occur as a result of the project.

2) The *BAAQMD CEQA Guidelines* contain thresholds of significance for criteria pollutants. For one of these thresholds (total emissions from project operations), a screening method is provided for determining whether a proposed project may potentially exceed the threshold. The Guidelines include a table providing approximate sizes of various land uses which, based on default assumptions for modeling

inputs, would result in mobile source emissions that exceed BAAQMD's threshold of significance for NO_x. The values in the table represent the approximate sizes of projects for which total emissions may exceed the threshold. The proposed 42 unit project falls below the limit of 320 single-family or 510 apartment units shown in the table, therefore the project would not be expected to exceed the thresholds of significance, and no further analysis is required.

The City of San Jose uses the threshold of significance established by the Bay Area Air Quality Management District (BAAQMD) to assess air quality impacts. Based on the BAAQMD threshold of significance, projects that generate fewer than 2,000 vehicle trips per day are not considered major air pollutant contributors and do not require a technical air quality study. As this proposed 42 unit residential project will generate less than 2,000 total peak hour vehicle trips per day, no air quality study was prepared for this project.

Construction Impacts.

The *BAAQMD CEQA Guidelines* establishes thresholds of significance for construction and operation (post construction) phases of projects. According to the *BAAQMD CEQA Guidelines*, the BAAQMD's "approach to CEQA analyses of construction impacts is to emphasize implementation of effective and comprehensive control measures rather than detailed quantification of emissions." The determination of significance with respect to construction emissions, according to the *Guidelines*, should be based on a consideration of the control measures to be implemented. Table 2 of the *BAAQMD CEQA Guidelines* contains the feasible control measures for construction emission of PM₁₀.

Implementation of the following project-level Mitigation Measure, based on Table 2 of the BAAQMD CEQA Guidelines, will reduce potential construction impacts to less than significant levels.

Mitigation Measure AQ-1: The following controls shall be implemented during all construction phases of the project:

- Water all active construction sites at least twice daily, and more often during windy periods;
- Cover all trucks hauling soil, sand and other loose materials *or* require all trucks to maintain at least two feet of freeboard;
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites;
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more);
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.) sufficient to prevent visible airborne dust;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

3) According to the *BAAQMD CEQA Guidelines*, a project would not result in a cumulative air quality impact if it does not individually result in a significant air quality impact, is located in a jurisdiction with a general plan that is consistent with the Clean Air Plan, and is consistent with the general plan. The project would not individually result in a significant air quality impact with the implementation of mitigation measures (see response to Air Quality Checklist Item #2, above). The San Jose General Plan is consistent with the CAP and the proposed project is consistent with the Major Strategies and Goals and Policies of the City's General Plan, as described below.

Major Strategies. The project is consistent with the General Plan's Growth Management Major Strategy, which seeks to promote new growth within the Greenline/Urban Growth Boundary so that new development will be prudently located to achieve the most efficient use of urban facilities and services,

and to that end it encourages infill development within urbanized areas where urban facilities and services are already available, thus minimizing the cost of providing urban services. This Major Strategy also emphasizes maintaining the balance between residential, commercial and industrial land uses in order to balance service demands and revenue sources, and stresses that the location of housing is critical to minimizing service costs. This Major Strategy encourages compact, efficient infill development and discourages more costly development at the edge of the City. The project site's location within an existing developed area, which has adequate public services, public utility capacities, and close proximity to mass transit, demonstrates the project's consistency with this Major Strategy.

The Housing Major Strategy seeks to maximize housing opportunities on infill parcels already served by the City, and to consider the addition of new residential lands only when the City is confident that urban services can be provided. It also seeks to provide sufficient housing opportunities for new workers to support continued economic development, and to encourage new housing within the City's existing Urban Service Area and higher density residential development particularly near transit facilities. The project is consistent with this Major Strategy, as it would locate higher density housing in a developed area that contains available utilities and access to existing mass transit.

Goals and Policies. The Residential Land Use Goal seeks to provide a high quality living environment in residential neighborhoods, and to ensure that lands planned for residential use are fully and efficiently utilized to maximize the City's housing supply. The project would be consistent with the Policies supporting these goals, including Residential Land Use Policies 1 and 24. Policy 1 encourages new residential development at urban densities (one dwelling unit per acre or greater) only where adequate services and facilities can be feasibly provided. Policy 24 states that new residential development should create a pedestrian friendly environment by connecting the features of the development with safe, convenient, accessible, and pleasant pedestrian facilities. Such connections should also be made between the new development, the adjoining neighborhood, transit access points, and nearby commercial areas. The proposed project, which will include pedestrian corridors throughout the development and will provide pedestrian access to the existing sidewalks on public streets, transit stops and local commercial facilities, is consistent with this Policy.

The proposed project is in conformance with the General Plan's Growth Management and Housing Major Strategies, and with the Residential Land Use Goals and Policies, and is therefore consistent with the CAP. Less than significant cumulative air quality impacts would result from implementation of the project.

4) The proposed project would not be expected to expose sensitive receptors to substantial pollutant concentrations, as the project would not generate substantial amounts of pollutants. Mitigation measures outlined in the response to Checklist Item 3.b, above, would reduce potential construction impacts to less than significant levels. Therefore, less than significant impacts would occur as a result of the project.

5) The proposed project would not generate any objectionable odors during construction or operation. Therefore, no impacts would occur as a result of the project.

CONCLUSION. The proposed development project is in conformance with the General Plan's Growth Management Housing Major Strategies, and with the Residential Land Use Goals and Policies. Conformance with the dust control measures contained in Mitigation Measure 3-1, would not result in significant Air Quality impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

BIOLOGICAL RESOURCES

1) The project site consists of developed parcels located in a residential/commercial area of the City of San Jose and is surrounded by existing development. The project site contains an industrial/office

building, a related accessory building, parking, and landscaping. None of the trees on the project site are listed on the City's List of Heritage Trees. Due to the developed nature of the project area, the potential for wildlife diversity is very low, in particular burrowing owl habitat is not present on the site. No species identified as a candidate, sensitive, or special status species are expected to occur on the site. There is no identifiable habitat for any species on the project site or on the neighboring sites which are developed.

2) The project site and its immediate surroundings do not contain riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The nearest riparian corridor the Guadalupe River, located approximately 1/4- mile west of the site and is separated from the site by developed properties and major roads. Therefore, no impacts would occur as a result of the project.

3) The United States Army Corps of Engineers (USACE) regulates the dredge and fill of Waters of the U.S. through Section 404 of the Clean Water Act. This project site is developed and does not contain federally protected waters or wetlands. Therefore, no impacts would occur as a result of the new project.

4) The subject project site is located in an urban area that is surrounded by industrial, commercial and residential land uses. The project site is not located within an established fish or wildlife migratory corridor. Therefore, no impacts would occur as a result of the new project.

5) The City of San Jose has a tree preservation ordinance that requires that a tree removal permit be obtained for the removal of any tree greater than 56 inches in circumference, measured at 24 inches above grade. A tree survey was conducted at the site by Urban Tree Management, and is dated May 11th, 2006. A copy of the tree report is attached in the Appendix section. The tree survey concluded that there are a total of 25 trees on the site. Three on site trees meet the City's definition of ordinance size, and would require mitigation for removal consistent with City Policy. The trees are located at the perimeter of the site in landscape strips. The project proposes to remove all the trees on the project site and replace according to City Policy, discussed below.

Construction of the project as proposed would result in the removal of all of the on-site trees, most of which occupying the perimeter of the property. According to established City thresholds, removal of 20 or more native ordinance sized tree species, and 100 non-ordinance sized trees would be considered to be a significant impact. The project proposes the removal of three non-native, ordinance sized trees and 22 non-ordinance sized trees; therefore, impacts would be considered less than significant.

Standard Measure BR-1: City Policy requires the replacement of the removed trees consistent with the following:

Diameter of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
18 inches or greater	5:1	4:1	3:1	24-inch box
12 - 18 inches	3:1	2:1	none	24-inch box
less than 12 inches	1:1	1:1	none	15-gallon container
x:x = tree replacement to tree loss ratio				
Note: Trees greater that 18" diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.				

In the event the project site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures will be implemented, to the satisfaction of the City's Environmental Principal Planner, at the development permit stage:

- The size of a 15-gallon replacement tree can be increased to 24-inch box and count as two replacement trees.
- An alternative site(s) will be identified for additional tree planting. Alternative sites may include local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of the Director of the Department of Planning, Building, and Code Enforcement. Contact Todd Capurso, PRNS Landscape Maintenance Manager, at 277-2733 or todd.capurso@sanjoseca.gov for specific park locations in need of trees.
- A donation of \$300 per mitigation tree to Our City Forest for in-lieu off-site tree planting in the community. These funds will be used for tree planting and maintenance of planted trees for approximately three years. A donation receipt for off-site tree planting will be provided to the Planning Project Manager prior to issuance of a development permit.

6) The subject site is not located in an area that is protected by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state conservation plan. Therefore, no impacts would occur as a result of the new project.

CONCLUSION. Implementation of the proposed project, in conformance with the City's tree removal requirements specified in the above mitigation measure, would not result in significant biological impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

CULTURAL RESOURCES

1) The structure on the property was constructed in 1980 and is not eligible for listing in the California Register of Historical Resources or the National Register of Historic Places.

2) The project site is located within an archaeologically sensitive zone, as defined by the City of San Jose, and is currently developed. The project site is also identified as a culturally sensitive zone in the North San Jose Development Policies Update Program EIR, specifically subsurface archaeological artifacts have been found within close proximity of the project site. As required by the North San Jose Development Policy Update Program EIR Cultural Resource Study was prepared by Dr. Bob Cartier entitled *Cultural Resource Evaluation for the Property at 90 Archer Street in the City of San Jose*, and dated May 16, 2006. The report is not appended to this document, it is considered confidential and has been submitted directly to the City of San Jose Planning Department.

The Cultural Resource Study states that the property does exist in a zone of archaeological sensitivity based on the archaeological records for surrounding sites. A general surface reconnaissance was performed at the site; however, little information could be gathered due to the significant amount of paving at the existing site. Due to the close proximity of the property to a noted historic resource and due to the inability to perform meaningful site reconnaissance, the Cultural Resources evaluation recommends the following mitigation measure consistent with the Mitigation Measures outlined in the North San Jose Development Policies Update Program EIR:

Mitigation Measure CR-1:

During demolition and construction activities, a qualified archaeologist shall be retained to spot-check and monitor excavation into native soils for the proposed project. In the event that historic or prehistoric materials are encountered during site demolition or construction activities, the following shall apply:

- 1) A qualified professional archaeologist will be notified and all further excavation activity shall be monitored. There shall be no excavation or disturbance of the site or any nearby area

reasonably suspected to overlie adjacent remains, until archaeological monitoring by the qualified archeologist begins.

2) Hand excavation and/or mechanical excavation will proceed to evaluate the deposits for determination of significance as defined by CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the City's Environmental Principal Planner, describing the testing program and subsequent results. These reports shall identify any program mitigation that the Developer shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources.)

3) In the event that human remains and/or cultural materials are found, all project-related construction shall cease within a 50-foot radius in order to proceed with the testing and mitigation measures required. Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California:

a) In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

b) A final report shall be submitted to the City's Environmental Principal Planner prior to release of a Certificate of Occupancy. This report shall contain a description of the mitigation programs and its results including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusions, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the City's Environmental Principal Planner.

3) The project site is located within a developed are and are not expected to impact unique paleontological or geographic features.

4) As stated in section 5-b above, the site is located in an area of archaeological sensitivity. Mitigation Measure 5-1 will bring impacts to potentially buried human remains to a less than significant level.

CONCLUSION. Implementation of the proposed project, in conformance with the Mitigation Measures described above, would not result in significant cultural resource impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

GEOLOGY & SOILS

1) The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with earth movement along the well defined, active fault zones of the San Andreas Fault system, which regionally trends in a northwesterly direction. The subject site is not located in a designated Alquist-Priolo Earthquake Fault Zone (known formerly as a Special Studies Zone). The site is located within a liquefaction zone. The nearest active faults are the Hayward Fault located 12.5 miles from the site and the Calaveras Fault, located approximately 13 miles from the site. The Monte Vista, San Andreas, and Sargent Faults are located approximately 14 miles, 20 miles, and 25 miles from the site, respectively. Therefore, the

potential for surface rupture or fault offset at the subject site would be considered remote. No impacts would occur as a result of the new project.

The project site and its surroundings may experience intense seismic ground shaking during the next major earthquake on the San Andreas, Hayward, Calaveras or other regional fault systems. The severity of seismic shaking at any given location depends on various factors, including earthquake magnitude, distance to the causative fault, depth to bedrock, physical characteristics of underlying soil and bedrock, and local topography. The San Andreas Fault, the Hayward Fault, and the Calaveras Fault would be the three faults most likely to produce intense seismic ground shaking in the project area. Given the geologic conditions of the region, the new project would not expose people or structures to any greater risks involving seismic ground shaking than would other projects located in a geologically similar setting.

While the potential for strong seismic ground shaking cannot be eliminated, adherence to the Uniform Building Code would mitigate such risk to the extent feasible. As required by the City of San Jose building permit process, the proposed new development would be required to be designed and constructed in accordance with the current Uniform Building Code and other applicable standards and practices of earthquake resistant construction. The California Building Code requires that a qualified professional classify and evaluate soil conditions for design of building foundations at proposed building sites. This would reduce potential impacts from strong ground shaking to a level that is not considered substantial or adverse.

The site is located in a liquefaction seismic hazard zone as designated by the State of California. The City's Geologic Hazard Maps indicate that the site has a high liquefaction potential. A geotechnical investigation was performed on the site by TRC Lowney, and the results were included in a report entitled *Geotechnical Investigation, 90 Archer Street, San Jose California*, dated July 10, 2006. A copy of the report is included in the appendix section of this Initial Study. However, the California State Building Code will require that the foundation construction recommendations contained in the Geotechnical Investigation be implemented to ensure that impacts due to liquefaction are less than significant.

Standard Measure GS-1: California State Building Code Requirements will ensure that impacts due to liquefaction are less than significant.

Standard Measure GS-2: The proposed structures on the site would be designed and constructed in conformance with the Uniform Building Code Guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking on the site.

2) The project will result in demolition and construction activities on the site. The construction would involve the removal of trees in addition to grading and earth moving activities. These activities would expose underlying soils, which would increase the potential for soil erosion from wind or stormwater runoff. As part of the permitting process, any future developer of the site would be required to prepare an Erosion Control Plan and Storm Water Pollution Prevention Plan (SWPPP). These plans would identify applicable "best management practices" to eliminate erosion potential on the site and would be subject to the review and approval of the Public Works Department.

3) Conformance with Building Code standards, as described in the response to Checklist Item Geology & Soils #1 and #2, above, would reduce potential impacts to a less than significant level.

4) The project site soils have been characterized as expansive in the Geotechnical Investigation. However, the proposed construction would be required to conform with Building Code standards, as described in the response to Checklist Item Geology & Soils #1., above, which would reduce potential impacts to a less than significant level.

- 5) City sanitary sewer service would be provided to the project site for the proposed project. No septic tanks or alternative wastewater disposal systems would be used. Therefore, no impacts would occur as a result of the project.

CONCLUSION. Implementation of the proposed project, in conformance with existing Building Code requirements, would not result in significant geological and soil impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

HAZARDOUS MATERIALS

- 1) The proposed residential project would not generate significant quantities of hazardous wastes. The City of San Jose sponsors a household hazardous waste disposal program that would be available to future homeowners on the site.

- 2) Phase I & Phase II Environmental Site Assessments were performed for the site by Versar Incorporated and are dated October 18, 2005 and November 28, 2005, respectively. The site assessments found that the site has a history of agricultural use. Later, the site was converted to commercial uses and an environmental chemical consulting company operated on the site. The Phase I concludes that there are no recognized environmental conditions that indicate an existing release, a past release, or a material threat of release of hazardous substances. Due to the agricultural site history, an analysis of shallow site soils was completed. However, as recommended by the Phase I (due to the history of chemicals used by the environmental chemical consulting company that previously existed on the site), gas samples were taken from the subsurface around the sewer lines to check for past releases. Results of the subsurface analysis are summarized below.

Versar Incorporated performed a series of soil borings and also tested the escaping gasses from the site soils. The testing detected concentrations of Volatile Organic Compounds (VOCs), copper and three organochlorine pesticides in the soil (DDE, DDD, DDT). The VOCs and copper were not found in levels that exceed human and ecological health levels. However, high concentrations of organochlorines were found at the site, particularly at the northwest portion of the site. The levels were detected the shallow soils at 1.0 to 2.5 feet below grade level only on the northwest portion of the site. The soil containing the organochlorines must be removed and properly disposed during demolition activities at the site. Because the project includes significant grading for the below grade parking garage, approximately 12-15 feet of soil will be excavated and removed around the entire site to allow construction of the proposed below grade parking garage, thus accomplishing the required removal.

The compounds analyzed in the Phase I and Phase II were also discussed in the North San Jose Development Policy Update Program EIR. No unexpected compounds, chemicals, or pollutants were found in the soils at the project site. The Phase I and Phase II evaluations recommend the following mitigation measure consistent with the Mitigation Measures outlined in the North San Jose Development Policies Update Program EIR.

Mitigation Measure HM-1: Soils containing concentrations of organochlorines that exceed the human and ecological health-based levels shall be removed from the site and properly disposed as based on the findings of the Phase II report for the property prepared by Versar Incorporated, dated November 28, 2005.

As discussed in the North San Jose Development Policy Update Program EIR, because of the combination of uses allowed (industrial, residential, commercial) in the Policy Update Area there is the potential for releases of hazardous industrial materials near residences. Potential off-site hazardous materials impacts have been addressed through studies completed in connection with nearby residential

developments on file with the City of San Jose Planning Division (PDC05-114, PDC06-130, GP06-04-01, PDC03-108, GP06-04-02).

The studies identified two facilities (Universal Semiconductor at 1925 Zanker Road and Haro's Metal Finishing at 439 Reynolds Circle) within a one mile radius of the project site that could potentially have an impact on the project site. The Screening Level Risk Evaluation determined the toxic endpoint of a phosphine release from Universal Semiconductor would not reach the project site and therefore would not have an impact. The occurrence of a hydrogen cyanide release scenario from Haro's Metal Finishing is considered extremely unlikely.

Although a worst case release could affect the project site, the likelihood of a worst case release occurring is significantly less than a likely release scenario. In addition, the implementation and enforcement of local, State, and Federal regulations regarding the use, storage and transportation of hazardous materials reduces the likelihood and significance of impacts to off-site land uses, in the event of accidental release. Therefore, based on the most likely release scenario and the regulations governing hazardous materials, nearby hazardous materials facilities will have a less than significant impact on the proposed project

3) The proposed housing project is not anticipated to involve the release of hazardous chemicals.

4) As stated in the above, a Phase I Site Assessment was prepared. The following discussion presents a summary of the findings and conclusions of the report.

The project site was not identified within any of the databases searched by Environmental Data Resources. Based on an analysis of federal and state databases, all adjacent hazardous sites are either a significant distance from the site with respect to groundwater flow and direction, or the chemicals of concern or site status are such that there is no significant impact associated with the sites.

5) The project site is not located within an airport land use plan area. However, the site is located within 2 miles of the San Jose International Airport. The project height will be less than the allowed 60 foot height limit, and because the structure is not located within the flight path for landing planes, a less than significant impact is anticipated.

6) The project site is not located in the vicinity of a private airstrip. Therefore, no impacts would occur as a result of the project.

7) The proposed project would not impair or physically interfere with the implementation of an adopted emergency response or emergency evacuation plan. No impacts would occur as a result of the project.

8) The project site is surrounded by industrial, commercial and residential land uses and is not located in or near an open space area that would be subject to wildland fires. Therefore, no impacts would occur as a result of the project.

CONCLUSION. Implementation of the proposed project with the mitigation measures described in the Phase II report for the project site would not result in significant hazards or hazardous materials impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

HYDROLOGY/WATER QUALITY

1) As discussed in the North San Jose Development Policies Update Program EIR, new construction in San Jose is subject to the conditions of the City's NPDES Permit, which was reissued by the Regional Water Quality Control Board in February 2001, with a revision of Provision C.3 (New and

Redevelopment Performance Standards) approved in June 2006. Provision C.3 was amended to enhance performance standards for new development and redevelopment projects. Under the amended Provision C.3, the City must now 1) require that certain sizes of new and redevelopment projects include storm water treatment measures; 2) ensure that the treatment measures be designed to treat an optimal volume or flow of storm water runoff from the project site; and 3) ensure that storm water treatment measures are properly installed, operated and maintained.

The City has developed a policy (Council Policy 6-29) that implements Provision C.3 of the NPDES Permit, requiring new development projects to include specific measures for improving the water quality of urban runoff to the maximum extent feasible. The Post-Construction Urban Runoff Management Policy establishes general guidelines and minimum Best Management Practices (BMPs) for specified land uses, and includes the requirement of regular maintenance to ensure their effectiveness. Implementation of these measures would reduce potential impacts related to water quality standards or waste discharge requirements to less than significant levels. In conformance with the Policy, the project will include site design and source control measures (which will be evaluated as a part of the PD Permit process) as well as post-construction stormwater treatment controls to treat runoff from the site.

Implementation of the following mitigation measures, consistent with NPDES Permit requirements, will reduce potential construction impacts to surface water quality to less than significant levels:

Mitigation Measure HWQ-1: The project shall incorporate Best Management Practices (BMPs) into the project to control the discharge of stormwater pollutants including sediments associated with construction activities. Examples of BMPs are contained in the publication *Blueprint for a Clean Bay*. Prior to the issuance of a grading permit, the applicant may be required to submit an Erosion Control Plan to the City Project Engineer, Department of Public Works, Room 308, 801 North First Street, San Jose, California 95110-1795. The Erosion Control Plan may include BMPs as specified in ABAG's *Manual of Standards Erosion & Sediment Control Measures* for reducing impacts on the City's storm drainage system from construction activities. For additional information about the Erosion Control Plan, the NPDES Permit requirements or the documents mentioned above, please call the Department of Public Works at (408) 535-8300.

Mitigation Measure HWQ-2: Prior to the commencement of any clearing, grading or excavation, the project shall comply with the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Construction Activities Permit as follows:

- The applicant shall develop, implement and maintain a Storm Water Pollution Prevention Plan (SWPPP) to control the discharge of stormwater pollutants including sediments associated with construction activities;
- The applicant shall file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB).

Mitigation Measure HWQ-3: The project applicant shall comply with the City of San Jose Grading Ordinance, including erosion and dust control during site preparation and with the City of San Jose Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction. The following specific BMPs will be implemented to prevent stormwater pollution and minimize potential sedimentation during construction:

- Restriction of grading to the dry season (April 15 through October 15);
- Utilize on-site sediment control BMPs to retain sediment on the project site;
- Utilize stabilized construction entrances and/or wash racks;
- Implement damp street sweeping;
- Provide temporary cover of disturbed surfaces to help control erosion during construction;
- Provide permanent cover to stabilize the disturbed surfaces after construction has been completed.

The proposed project will not cause or contribute to any groundwater receiving water quality objectives.

2) The proposed project would not directly withdraw groundwater from the site. Rather, the San Jose Water Company would provide domestic water service to the site. Water demand associated with the proposed commercial development on the site would be considered minor and would not require a substantial increase in groundwater pumping. The site is not in a designated recharge zone, and would therefore not interfere with the recharge of groundwater. Less than significant impacts would occur as a result of the project.

3) There are no waterways on-site that would be altered as a result of the project. However, construction of the proposed project on the site would temporarily alter existing drainage patterns, and could result in on and off-site erosion and siltation.

Any future development of the site would be subject to a General Construction Permit issued by the State Water Resources Control Board for storm water discharges associated with construction activity. The General Construction Permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which must identify Best Management Practices (BMPs) to reduce pollutants (including erosion and siltation) in storm water discharges from construction activities. Compliance with the General Construction Permit, preparation of the SWPPP, and implementation of the City's BMPs for stormwater pollution prevention would reduce potential erosion and siltation impacts to a less than significant level. Therefore, impacts related to erosion and siltation would be considered less than significant.

4) As previously stated, there are no waterways on the site that would be altered as a result of the project. However, construction of the proposed development would temporarily and/or permanently alter existing drainage patterns on the site, and could potentially increase the site's impervious surface area, resulting in an incremental increase in runoff from the site. The proposed drainage plan includes the construction of an adequately sized on-site storm drainage collection system designed to control on-site and off-site flooding. In addition, the project would be required to conform to the City's Post-Construction Urban Runoff Management Policy.

5) As discussed above, on-site construction can cause erosion and sedimentation, and post-construction residential development on the site could potentially create sources of polluted runoff from vehicle traffic and parking, roofing materials, landscape maintenance, use and storage of household hazardous materials, and other activities associated with residential use. Conformance to the NPDES Permit requirements through the City's grading permit process would reduce potential erosion and sedimentation impacts to less than significant levels. Consistent with the City's Post Construction Urban Runoff Management Policy, the project incorporates infiltration planters to treat stormwater runoff.

There are existing City storm drain lines in North First Street that are expected to have adequate capacity to accommodate runoff generated from the project site.

6) There are no other identified potential impacts to water quality from the project.

7) The project site is located within the AO flood zone. Construction of the proposed project, specifically the below grade parking garage, requires that the site obtain flood clearance in the form of a Conditional Letter of Map Revision (CLOMR). A (CLOMR) is FEMA's comment on a proposed project that would affect the hydrologic and/or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway or effective Base Flood Elevations, in this case the site will be filled above the flood level elevation. The CLOMR letter does not revise an effective National Flood Insurance Program map, it indicates whether the project, if built as proposed, would or would not be removed from the Special Flood Hazard Area by FEMA. Based upon the existing grades at the site and discussions with City of San Jose Department of Public Works staff, CLOMR approval is likely.

Should the project not receive the predicted CLOMR flood zone clearance, the residential structure will need to be built above the required flood plane grade (approximately 1-2 feet) above the existing grade.

8) The project site is located within the AO flood zone, see response to Hydrology & Water Quality Section 7 above.

9) There are no levees or dams in the vicinity of the site that would impact the project.

10) The project site is not located in an area subject to seiche, tsunami or mudflow. Therefore, no impacts would occur.

CONCLUSION. Implementation of the proposed project, in conformance with NPDES Permit and Post-Construction Urban Runoff Management Policy requirements and General Plan Policy requirements, would not result in significant hydrology and water quality impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

LAND USE & PLANNING

1) Projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The proposed rezoning would allow construction of a residential structure on what is currently a commercial site, consistent with existing residential uses on surrounding properties and consistent with the existing General Plan designation for the site. Therefore, the project would not physically divide an established community.

The proposed project will be subject to architectural and site review by the City of San Jose at the Planned Development Permit stage, subsequent to rezoning approval. Such review will include conformance with the City's adopted Residential Design Guidelines. The Guidelines are intended to ensure that new development is compatible with existing neighborhood character and does not adversely impact neighboring residential uses. Less than significant impacts would occur as a result of the project.

2) The site is General Plan designated Transit Corridor Residential. The proposed PD Zoning would change the zoning from (CG) Commercial General to A(PD), a Planned Development Zoning District, allowing a Medium-High Density residential use consistent with the General Plan designation.

3) As noted in the response to Biological Resources Checklist Item #6, the project site is not located within the boundaries of an adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, no impacts would occur as a result of the future project.

CONCLUSION. Implementation of the proposed project, which is consistent with the existing General Plan and Redevelopment Area policies, goals and objectives, would not result in significant land use impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

MINERAL RESOURCES

1) Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975, the State Mining and Geology Board has designated the Communications Hill Area of San Jose as containing mineral deposits of regional significance. Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San Jose as containing mineral deposits that are either of statewide significance, or the significance of which requires further evaluation. The subject project site is not

located in the Communications Hill Area. Therefore, the project would not result in significant mineral resource impacts.

2) Other than the Communications Hill Area, the City of San Jose 2020 General Plan does not identify any locally important mineral resources within the City of San Jose. Therefore, the project would not result in impacts related to locally important mineral resources

CONCLUSION. Implementation of the proposed project would not result in significant mineral resource impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

NOISE

1) An Environmental Noise Assessment was performed for the project by Edward L. Pack Associates Inc. The purpose of the study, dated May 22, 2006, was to quantify the existing noise environment at the project site, compare the noise environment with applicable City and State standards, and propose conceptual mitigation, as necessary. The study included the results and comparison of long-term and short-term noise measurements taken at the site. The study assumed a 25% increase in future traffic volumes in the area. The following discussion summarizes the findings and conclusions of the study, a copy of which is included in the Appendix section of this document.

The City of San Jose Noise Element of the General Plan states that the City's acceptable noise level objectives are 55 DNL as the long-range exterior noise quality level, 60 DNL as the short-range exterior noise quality level, 45 DNL as the interior noise quality level, and 76 DNL as the maximum exterior noise level necessary to avoid significant adverse health effects. The Land Use Compatibility Guidelines for Multi-Family Residential Development contained in the Noise Element indicate that a DNL of 60 dB or lower is considered "satisfactory" for residential projects. Projects located in areas with an existing DNL higher than 60dB therefore require sound attenuation, which should be incorporated into the building design, generally consisting of sound rated windows and walls, to mitigate interior noise to DNL 45 dB or lower. Outdoor activities are limited to acoustically protected areas or entirely indoors if the DNL exceeds 70 dB.

Exterior Noise Levels. The study concluded that noise levels at the proposed outdoor activity areas will be a DNL of approximately 62 dB with two thirds of the noise coming from the adjacent roadways and one third coming from the airport noise. Because there is no way to shield the airport noise as it is an overhead source, the City noise policies allow the slightly elevated noise levels of 62 dB without it being considered a significant impact. No Mitigation Measures are required as impacts are less than significant.

Interior Noise Levels. Noise levels will be the highest for units facing the streets and the airport, approximately 47 DNL. This is 2 DNL louder than what is considered a less than significant impact under CEQA. Therefore, the following Mitigation Measure is necessary to reduce noise to levels that meet the City indoor noise requirements.

The Environmental Noise Assessment recommend the following mitigation measure consistent with the Mitigation Measures outlined in the North San Jose Development Policies Update Program EIR.

Mitigation Measure N-1: The project shall be constructed in conformance with the STC rating recommendations for windows and doors as contained in the report entitled *Noise Assessment Study for the Planned "90 Archer Street" Apartments*, by Edward L. Pack Associates Inc., dated May 22, 2006. Specifically, the project must:

“Maintain closed at all times all windows and glass doors of living spaces with a north of west orientation and within 137 feet of the centerline of Archer Street. These windows and glass doors may have any type of glass. Provide some type of mechanical ventilation.”

2) Residential uses, as proposed, do not typically generate excessive amounts of groundborne vibration or noise levels, and there are no excessive groundborne vibration or noise levels existing in the vicinity of the project site. Therefore the project impacts would be less than significant.

3) Traffic generated by the project would contribute to future noise levels in the vicinity of the project. The noise study prepared for the project calculated an increase in the DNL of approximately 1 dB, due to estimated project traffic volumes and the effect of background noise from surrounding roads. This increase would not be considered significant.

4) The proposed project would result in temporary construction noise impacts; however, these would be considered temporary and would be reduced to less than significant levels by the implementation of the following standard construction noise mitigation measures.

Mitigation Measure N-2: The following measures shall be implemented by the project developer and/or construction site supervisor to reduce potential construction noise impacts to surrounding neighbors:

- Notify neighbors of the schedule and type of equipment used for each phase of construction;
- Limit hours of construction to between 7:00 a.m. and 7:00 p.m. on weekdays, when construction occurs within 500 feet of existing residences, in conformance with City standards;
- Locate noisy stationary equipment (i.e., generators or compressors) away from neighboring residences;
- Require that all construction equipment be in good working order and that mufflers be inspected for proper functioning;
- Require that vehicles and compressors turn off engines when not in use;
- Utilize available noise suppression devices and techniques as appropriate, in conformance with General Plan policy; and
- Designate a construction noise coordinator who would be available to respond to complaints from neighbors and take appropriate measures to reduce noise.

5) The project site is located within two miles of a public airport, San Jose International Airport. The Noise Assessment for the project site (included in the Appendix) concludes that airport noise adds to the background conditions for the project. The background noise is at a level that is considered a significant impact for the purposes of CEQA. However, the implementation of Mitigation Measure N-1 will reduce the airport background noise to a level that is less than significant.

6) The project site is not located within the vicinity of a private airstrip. Therefore, no impacts would occur as a result of the project.

CONCLUSION. Implementation of the proposed project would not result in significant noise impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

POPULATION AND HOUSING

1) The project proposes the construction of up to 42 single-family residences in an area that already contains residential uses, and would therefore only result in an increase of 126 people (at the rate of 3.0 people per single-family residence). The project would not induce growth in an area where development

is not already allowed, and would not create a significant demand for new infrastructure in an area where infrastructure is not available. In addition, the proposal would not create a precedent for growth outside the City's existing Urban Growth Boundary. Less than significant impacts would occur as a result of the project.

2) No residential structures will be demolished as a part of the project.

3) Refer to the response to Population and Housing Section #2.

CONCLUSION. Implementation of the project would not result in population and housing impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

PUBLIC SERVICES

1) The project site would be served by the City of San Jose Fire Department. The Department has a performance standard to maintain a four-minute average response time to all emergency calls in the City. Fire Station 5, which is located at 1380 N 10th Street, would provide initial response to the site. Fire Station 5 is approximately 0.6 miles east of the site (driving distance).

The project would create new residential uses on the property, resulting in a minor increase in the demand for fire services. The project site is located adjacent to existing single-family residential tract neighborhood that area served by Fire Station 5, and would not result in substantial adverse physical impacts associated with a need for new facilities in order to maintain acceptable levels of service or performance objectives.

2) As with fire protection, the project would result in a minor increase in the demand for police services. The project site is located adjacent to existing and planned residential developments currently served by the City Police Department. The project would not result in substantial adverse physical impacts associated with a need for new facilities in order to maintain acceptable levels of service or performance objectives.

3) The project would result in a minor increase in the City's population, which would, in turn, result in an increase in demand for educational facilities. The project site is located within the San Jose Unified School District attendance area. The project developer would be required by law to pay school fees in the amount of \$1.93 per square foot as mitigation for school facilities impacts. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees (\$1.93) "is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or developed of real property, or any change in governmental organization or reorganization." Therefore, subsequent to payment of statutory fees, school impacts would be considered less than significant.

4) The City of San Jose manages approximately 3,500 acres of regional and neighborhood parkland. The City provides developed park lands, open space and community facilities, some of which are supplemented by other public uses such as school playgrounds and play fields, County parks, and trail facilities on Santa Clara Valley Water District lands. The City's Departments of Parks, Recreation and Neighborhood Services, Public Works, and General Services are responsible for the design, construction, maintenance and operation of all City park and recreation facilities. The City has adopted a Parkland Dedication Ordinance (PDO) and a Park Impact Ordinance (PIO), which require residential developers to dedicate public parkland or pay in-lieu fees, or both, to offset the demand for neighborhood parkland created by their housing development projects. The proposed residential project will be required to pay fees in accordance with the PDO and PIO standards.

5) The subject project site is located within an existing urban community that is currently serviced by existing public services and utilities, including gas, electrical, telephone, and cable. Development of the proposed project would result in a minor increase in the demand for these services and utilities. However, the minor increase would not result in significant impacts, since the existing services and utilities are currently located at or near the site. Therefore, less than significant impacts would occur as a result of the project.

CONCLUSION. Development of the proposed project would not result in significant public services impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

RECREATION

a) See response to Checklist Item under Public Services #4, above.

b) See response to Checklist Item under Public Services #4, above.

CONCLUSION. Development of the proposed project would not result in significant recreation impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

TRANSPORTATION AND TRAFFIC

1-2) The project proposes to construct up to 42 residential units. The traffic impacts from the proposed residential development have been analyzed and accounted for in the North San Jose Development Policies Update Program FEIR. Therefore, the proposed project would not result in additional traffic trips beyond what was assumed in the North San Jose Development Policies Update Program FEIR. For these reasons, the proposed project would not result in any new roadway, transit, or pedestrian impacts; or impacts of greater severity than were already disclosed in the North San Jose Development Policies Update Program FEIR.

Standard Measure TT-1: The project will comply with the City's North San Jose Area Development Policy Traffic Impact Fee.

3) The project would not have any impact on air traffic. No impacts would occur as a result of the project.

4) The proposed private driveway off of Kerley Avenue is assumed to be sufficient to accommodate the small project traffic volumes generated by the project. The driveway meets City standards for grade and distance.

5) The project will be required to be designed in accordance with City of San Jose emergency access standards. Therefore, no impacts would occur as a result of the project.

6) The project would provide approximately 72 covered parking spaces for a ratio of 1.7 spaces per unit. This ratio is consistent with the requirements of the San Jose Zoning Ordinance. In addition, there are approximately 10 on street parking spaces available around the project frontage that could be utilized by guests at the site. Less than significant impacts are anticipated.

7) The project will comply with all City and County policies regarding alternative transportation. No impacts would occur as a result of the project.

CONCLUSION. Development of the proposed project, in conformance with General Plan mitigation measures described above, would not result in significant transportation impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

UTILITIES AND SERVICE SYSTEMS

1) The future project would be subject to all wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board. The project is not expected to exceed any such requirements. Therefore, no impacts would occur as a result of the project.

2) The San Jose Water Company (SJWC) provides water services to the project site. The SJWC water supply is treated at two SJWC water treatment plants and several Santa Clara Valley Water District (SCVWD) water treatment plants. The proposed residential project would result in a minor increase in the demand for treated drinking water. It is anticipated that the existing water treatment facilities of the SJWC and the SCVWD would have adequate capacity to serve the project. Therefore, the proposed project would not require or result in the construction of new water treatment facilities or the expansion of existing facilities. Therefore, no impacts would occur as a result of the project. There are existing City of San Jose sanitary sewers in the project vicinity that are available to serve the project. A sewer line is located along Archer Street.

The San Jose/Santa Clara Water Pollution Control Plant would provide wastewater treatment services for the project. The project would result in a minor increase in the demand for sewer treatment services. The existing wastewater treatment facility would have the capacity to adequately serve the project, therefore, the project would not require or result in the construction or expansion of a wastewater treatment facility and less than significant impacts would occur as a result of the project.

3) The project site is located in a developed area containing existing City of San Jose storm drain lines. There is an existing 8-inch storm drain line located in Archer Street. The project developer will be responsible for providing the necessary infrastructure improvements to accommodate stormwater drainage from the site, in conformance with City policy. In addition, the proposed on-site storm drainage facilities will be required to be designed to meet the specifications and requirements of the City of San Jose Public Works Department. Less than significant impacts would result.

4) Refer to the Response under Utilities and Service Systems Checklist Item #2. The project would receive domestic water service from the San Jose Water Company. The water demand associated with the project would be minor and would not require San Jose Water Company to obtain additional water sources or entitlements. Less than significant impacts would occur as a result of the project.

5) As noted in the response under Utilities and Service Systems Checklist Item #2, the San Jose/Santa Clara Water Pollution Control Plant would provide wastewater treatment services to the project. The facility has a treatment capacity of 167 million gallons per day. The facility currently operates at approximately 80 percent capacity, processing an estimated 134 million gallons per day (dry weather peak). The project would result in a minor increase in the demand for wastewater treatment services. The existing wastewater treatment facility would have the capacity to adequately serve the project, therefore no impacts would occur as a result of the project.

6) According to the Source Reduction and Recycling Element prepared for the City of San Jose and the County-wide Integrated Management Plan, there is sufficient landfill capacity to meet the solid waste disposal demands of Santa Clara County for at least 30 more years. The amount of waste generated by the project would not be considered substantial. Therefore, less than significant impacts would occur as a result of the future project.

7) The proposed residential project would not create the need for any special solid waste disposal handling. The City's Household Hazardous Waste Program will be available to the future residents. The project will comply with the applicable City recycling program requirements. Therefore, no impacts would occur as a result of the project.

CONCLUSION. Implementation of the proposed project would not result in utilities and service system impacts not previously analyzed under the North San Jose Development Policies Update Program EIR. **(Same Impact as Approved Project, Mitigation Measures Previously Identified in the program EIR are Included in the Proposed Project)**

MANDATORY FINDINGS OF SIGNIFICANCE

1) The proposed rezoning from (CG) Commercial General to A(PD) Planned Development District to allow for multi-family attached residential uses on the site would result in a minor change in the on-site environment. No special-status species or habitat is present on the project site, therefore the project would not reduce the habitat of fish or wildlife species, cause their populations to drop below self-sustaining levels, or restrict their range. There are no known historic or cultural resources on the site.

2) The project would result in 42 residential units out of approximately 32,000 residential units considered in the North San José Development Policies Environmental Impact Report. The cumulative effects of the 32,000 residential units, including the project's resulting 42 residential units, have been addressed in the North San José Environmental Impact Report.

3) No physical environmental issue areas where substantial adverse effects on human beings, either directly or indirectly, have been identified for the project. Therefore, no impacts would occur as a result of the project.

Checklist Sources/Sources for Impact Discussion

1. Association of Bay Area Governments, *Projections 2005*, 2005.
2. Bay Area Air Quality Management District, *BAAQMD CEQA Guidelines – Assessing the Air Quality Impacts of Projects and Plans*, April 1996, revised December 1999.
3. Bay Area Air Quality Management District, *Bay Area 2000 Clean Air Plan*, December 20, 2000.
4. California Dept. of Conservation, Division of Land Resource Protection, *Santa Clara County Important Farmland 2000*, 2001.
5. California Department of Toxic Substances Control, DTSC's Hazardous Waste and Substances Site List (Cortese List), http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm?county=43
6. Urban Tree management. Tree Survey, dated May 11, 2006.
7. City of San Jose Environmental Services Department, <http://www.sjrecycles.org/>.
8. City of San Jose, Fire Department website, http://www.sjfd.org/sta_location.htm.
9. City of San Jose, *Focus on the Future San Jose 2020 General Plan*, adopted August 16, 1994, as amended through December 2005.
10. City of San Jose, *Interim Guidelines for Traffic Impact Analysis of Land Developments*, June 1994.
11. City of San Jose, *Post-Construction Urban Runoff Management Policy*, May 17, 2005.
12. City of San Jose Public Works Department, *Geologic Hazard Maps*.

13. City of San Jose, Public Works Department website,
http://www.sanjoseca.gov/gis/pub_wrks/mapbook/plot.asp?file=San99A.
14. City of San Jose, *Title 13 of the San Jose Municipal Code (Tree Preservation)*, as mended.
15. City of San Jose, *Title 20 of the San Jose Municipal Code (Zoning Ordinance)*, as amended December 2002.
16. FEMA website, <http://mapserver2.esri.com/cgi-bin/hazard.adol?z=&cgd=&c=san+jose&st=California&cd=g&s=0>
17. TJKM Transportation Consultants, Inc., Trip Generation Summary, July 14, 2006.
18. HMM Engineers, Planned Development Rezoning for 90 Archer Street, *General Development Plan*, dated February 26, 2007.
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28. *Phase II Environmental Site Assessment*; Prepared by Versar Incorporated, dated November 28, 2005.
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30. Meeting with Maria Angeles at the City of San Jose, Department of Public Works on October 31, 2006.
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32. Vicinity Hazardous Materials Users Survey prepared by Belinda P. Blackie in June 2006.
33. Vicinity Hazardous Materials Users Survey prepared by Belinda P. Blackie in October 2006
(Prepared as part of the Initial Study for Planned Development Zoning Applications:
PDC05-114 – Mixed Use project located at 1731 and 1733 North First Street
PDC06-130 – Foster Towers Residential Development located at 40 and 50 Airport Parkway)
34. Vicinity Hazardous Materials Users Survey prepared by Belinda P. Blackie in August 2006.

35. Screening Evaluation completed by Integrated Engineering Services in October 2006 which was based on Hazardous Material Modeling completed by Toxichem Management Systems Inc. in September 2006.
(Prepared as part of the San Jose Flea Market General Plan Amendment & Planned Development Rezoning, GP06-04-01 & PDC03-108, located at 1590 Berryessa Road)
36. Hazardous Material Users Evaluation prepared by TRC Lowney Associates in November 2004, April 2006 and May 2006, respectively.
(Prepared as part of the Fox Property General Plan Amendment (GP06-04-02) located at 1040, 1060, & 1080 E. Brokaw Road)

APPENDIX A:

Tree Survey



URBAN TREE
MANAGEMENT

5/11/06

Essex Properties
925 East Meadow Drive
Palo Alto, CA 94303

RE: 90 Archer, San Jose, CA

To Whom It May Concern:

Assignment

It was my assignment to inspect the trees at 90 Archer in San Jose & write a Tree Survey (see image to right).



Summary

There are 25 trees on site & they will **all** be removed during demolition. The few "Ordinance Sized" trees that will be removed will be mitigated at the PD Permit phase of development. A large number of new trees will be planted as a part of this project (see Landscape Plans).

Discussion

Of the 25 trees on site 22 are Redwoods. The Redwoods were planted along the edges of the property and were meant to shade the parking structure & provide screening from the neighboring buildings. Some of these trees are in good health, mostly due to their receiving sufficient irrigation.



The trees that are doing less well are stressed due in part to insufficient irrigation. Redwoods require large amounts of regular irrigation if they are to succeed in areas outside of Coastal regions.



P.O. Box 971
Los Gatos, CA
95031-0971

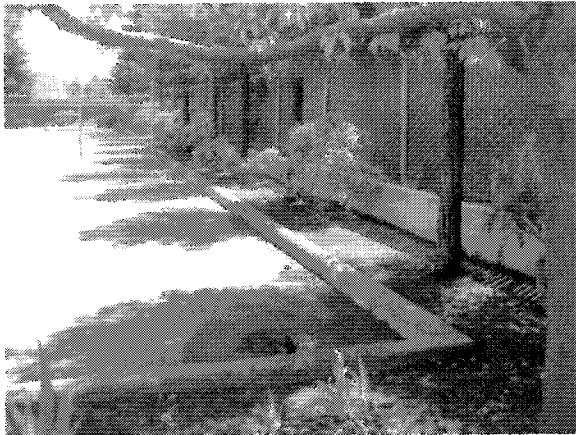
P 650.321-0202
F 408.399-8063

Certified Arborist
WC ISA #623

Contractors License
#755989

The healthy Redwoods have full canopies a dark green luster to the leaves & 8" – 12" of annual shoot growth. The stressed Redwoods have smaller leaves that appear desiccated on the edges and only have 1" – 3" of new annual shoot growth.

Another limiting factor for **all** of the trees on site is the narrow planting strips around the perimeter of the lot (see images to right). Redwoods become very large trees at maturity & need significant amounts of water & space to survive well in good health. Redwoods are also particularly aggressive when it comes to their ability to destroy nearby concrete. It is only a matter of time before the Redwoods eventually begin cracking the concrete perimeters which now borders them. Any future development plans shall take into consideration their destructive nature in regards to hardscapes.



There are two other significant trees on site. There is a healthy Canary Island Pine (*Pinus canariensis*) & a healthy, but leaning, Sycamore (*Platanus racemosa*) (see images above).

Please contact me should you have any further questions.

Respectfully,

A handwritten signature in black ink, appearing to read "Michael P. Young". The signature is fluid and cursive, with a large, stylized "Y" at the end.

Michael P. Young

Tree #	Circumference" at 24" up	Species	Health/Structure	Width/Height'	Comments
1	69	Redwood	Good/Good	24, 56	
2	59.5	Redwood	Good/Good	23, 50	
3	56.5	Redwood	Good/Good	20, 48	
4	35 and 47	Redwood	Good/Fair	21, 48	Codominant - 2 main stems
5	28	Camphor	Fair-Good/Good	18, 17	Lack of water & small planting area - trees stressed
6	25	Redwood	Fair/Good	8, 18	" " " " "
7	30	Redwood	Fair/Good	8, 19	" " " " "
8	28	Redwood	Fair/Good	8, 18	" " " " "
9	33	Redwood	Fair-Poor/Good	8, 25	Lack of water - trees stressed
10	28	Redwood	Fair/Good	8, 17	" " " " "
11	26.5	Redwood	Good/Good	8, 18	
12	28	Redwood	Good/Good	7, 18	
13	28	Redwood	Good/Good	7, 18	
14	34.5	Redwood	Good/Good	8, 25	
15	36	Redwood	Good/Good	8, 25	
16	23.5	Redwood	Good/Good	6, 18	
17	34.5	Redwood	Good/Good	7, 18	
18	34.5	Redwood	Good/Good	8, 24	
19	14	Redwood	Fair-Good/Good	8, 24	Lack of water - trees stressed
20	33	Redwood	Good/Good	4, 8	
21	28	Redwood	Good/Good	8, 24	
22	28	Redwood	Fair/Good	8, 26	Lack of water - trees stressed
23	26.5	Redwood	Fair/Good	6, 23	" " " " "
24	55	Sycamore	Good/Fair	25, 30	Leans
25	55	Canary Island Pine	Good/Good	25, 30	
	KEY:	Redwood = Sequoia sempervirens			
		Camphor = Cinnamomum camphora			
		Sycamore = Platanus racemosa			
		Canary Island Pine = Pinus canariensis			

APPENDIX B:

Geotechnical Investigation



Geotechnical Investigation

90 Archer Street
San Jose, California

Report No. 881-8 has been prepared for:

Essex Property Trust, Inc.

925 E. Meadow Drive

Palo Alto, California

July 10, 2006

DRAFT

Alberto Cruz
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FIGURE 1 — VICINITY MAP

FIGURE 2 — SITE PLAN

FIGURE 3 — REGIONAL FAULT MAP

FIGURE 4 — HISTORICAL EARTHQUAKES

APPENDIX A — FIELD INVESTIGATION

APPENDIX B — LABORATORY PROGRAM

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**GEOTECHNICAL INVESTIGATION
90 ARCHER STREET
SAN JOSE, CALIFORNIA**

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1.0 INTRODUCTION

In this report we present the results of our geotechnical investigation for a proposed multi-family residential structure to be located at 90 Archer Street in San Jose, California. The location of the site is shown on the Vicinity Map, Figure 1. The purpose of our investigation was to evaluate the subsurface conditions at the site and to provide geotechnical recommendations for design of the proposed development.

For our use we were provided with undated plan sheets A1.0, A2.0, A3.0, A4.0 and A8.0 prepared by Naylor & Chu Architects. Project structural loads were not available at the time this report was prepared. Loading assumptions are discussed in the "Foundation" section of this report.

1.1 Project Description

The site is located at 90 Archer Street in San Jose, California. The site is approximately 0.66 acres and is currently occupied by a vacant office building. The site contains several mature trees, asphalt concrete paving, and associated office building landscaping. We understand that Essex Property Trust is planning to construct a new 42 unit apartment building. The apartment building footprint is planned to cover essentially the entire property footprint. The structure is planned to be 5 stories, with the first and second levels consisting of parking. The first level will be constructed at-grade. Some perimeter units may be constructed on the ground and second levels.

1.2 Scope of Services

Our scope of services was presented in detail in our agreement with you dated May 2, 2006. To accomplish this work, we provided the following services:

- ▼ Exploration of subsurface conditions by drilling and logging two hollow stem borings to depths of about 50 and 51½ feet and retrieving soil samples for observation and laboratory testing. We also performed three Cone Penetration Tests (CPTs). To depths of about 50 to 70 feet.
- ▼ Evaluation of physical and engineering properties of the subsurface soils by visually classifying the samples and performing various laboratory tests on selected samples.
- ▼ Engineering analysis to evaluate site earthwork, building foundations, slabs-on-grade, retaining walls and pavements.
- ▼ Preparation of this report to summarize our findings and to present our conclusions and recommendations.

Environmental services were not included as part of this study.

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2.0 SITE CONDITIONS

2.1 Exploration Program

Subsurface exploration was performed on June 1 and June 13, 2006 using conventional, truck-mounted hollow-stem auger drilling and CPT equipment to investigate, sample, and log subsurface soils. Two hollow-stem exploratory borings were drilled to depths of about 50 and 51½ feet. Three CPTs were advanced to depths of about 50 to 70 feet. Borings and CPTs were permitted and backfilled in accordance with Santa Clara Valley Water District guidelines. The approximate locations of the borings and CPTs are shown on the Site Plan, Figure 2. Logs of our borings and CPTs and details regarding our field investigation are included in Appendix A; our laboratory tests are discussed in Appendix B.

2.2 Surface

We performed a brief surface reconnaissance during our site exploration. The site consists of a 0.66 acre parcel located southwest of the intersection of Archer Street and Kerley Drive. The site is bounded by Archer Street to the north, Kerley Drive to the east, and commercial properties to the west and south. The site was occupied by a single-story office building with associated asphalt concrete paving and landscaping. The site appeared relatively level and was estimated to have only a couple feet of topographic relief across the site.

2.3 Subsurface

Below, the subsurface conditions encountered in each exploration are summarized.

Exploratory boring EB-1 encountered about 7½ feet of stiff to very stiff lean to fat clay over sand with varying amounts of fine grain soil to a depth of approximately 17 ½ feet. Medium stiff to stiff clay was encountered to a depth of approximately 38 feet. Interbedded layers of medium dense to dense sand and stiff clays were encountered to the terminal depth of the boring of about 51½ feet.

CPT-1 was performed near boring EB-1, so that the soil samples collected in the boring could be used to verify the CPT interpretations. CPT-1 encountered approximately 7 feet of clayey soil, over medium dense sands to a depth of approximately 18 feet over clayey soil to a depth of about 37 ½ feet. Interbedded clays and sands were encountered to a depth of approximately 50 feet, the terminal depth of the CPT. Sand layer thicknesses appeared to be approximately 2 to 5 feet thick. The CPT interpretations are consistent with the soils encountered in nearby boring EB-1.

Exploratory Boring EB-2 primarily encountered clays to a depth of about 38 feet. Interbedded layers of sand clay and silt were encountered between depths of 38 and 50 feet, the terminal depth of the boring. Plasticity Index (PI) testing performed on a near surface sample resulted in a PI of 21, indicating moderate plasticity and expansion potential of the near surface soil.

CPT-2 encountered predominantly clayey soil to a depth of approximately 36 feet where interbedded layers of sand and clay were encountered to the terminal depth of the CPT of approximately 50 feet. Sand layer thicknesses appeared to be approximately 5 feet thick.

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CPT-3 encountered clayey soil to a depth of approximately 53 feet. Primarily dense sands were encountered to a depth of about 68 feet, the terminal depth of the CPT. The CPT was intended to be extended to depths of about 90 feet, however, due to the dense sands encountered, the CPT could not be advanced deeper than 68 feet.

2.4 Ground Water

Free ground water was encountered during drilling in both EB-1 and EB-2 at depths of approximately 10 to 10½ feet below the ground surface. Borings were grouted immediately after drilling, and the depths measured may not reflect stabilized ground water levels. Maps published in the CGS Seismic Hazard Report for the San Jose West Quadrangle indicate that historically high ground water depths less than 10 feet below the site grades. For our liquefaction evaluation, we used a design ground water depth of approximately 5 feet below the ground surface. Fluctuations in the level of the ground water may occur due to variations in rainfall, underground drainage patterns, and other factors not evident at the time measurements were made.

3.0 GEOLOGIC HAZARDS

A brief qualitative evaluation of geologic hazards was made during this investigation. Our comments concerning these hazards are presented below.

3.1 Fault Rupture Hazard

A Regional Fault Map illustrating known active faults relative to the site is presented in Figure 3. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone (known formerly as a Special Studies Zone) or a City of San Jose Potential Hazard Zone. As shown on Figure 3, no known surface expression of active faults is believed to cross the site. Fault rupture through the site, therefore, is not anticipated.

3.2 Ground Shaking

Strong ground shaking can be expected at the site during moderate to severe earthquakes in the general region. This is common to virtually all developments in the San Francisco Bay Area. The "Seismicity" section that follows summarizes potential levels of ground shaking at the site.

3.3 Liquefaction

3.3.1 General Background

The site is located within a State of California Seismic Hazard Zone for liquefaction (CGS 2002, San Jose West Quadrangle). Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage, such as silty sands or sands and gravels capped by or containing seams of impermeable sediment.

When seismic ground shaking occurs, the soil is subjected to cyclic shear stresses that can cause increased hydrostatic pressure that induces liquefaction. Liquefaction can

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cause softening, and large cyclic deformations can result. In loose granular soils, softening can also be accompanied by a loss of shear strength that may lead to large shear deformations or even flow failure under moderate to high shear stresses, such as beneath a foundation or sloping ground (NCEER/NSF, 1998).

Loose granular soil can also settle (compact) during liquefaction and as pore pressures dissipate following an earthquake. Limited field data is available on this subject; however, in some cases, settlement on the order of 2 to 3 percent of the thickness of the liquefied zone has been measured.

3.3.2 Subsurface Conditions Encountered

As discussed above, several sand layers were encountered. A relatively thick medium dense sand layer was encountered between the approximate depths of 7 and 17 feet in CPT-1 and EB-1 that has significant liquefaction potential, as discussed below.

3.3.3 Methods of Analysis and Results

Our liquefaction analyses followed the methods presented by the 1998 NCEER Workshops (Youd, et al., 2001) in accordance with guidelines set forth in CDMG Special Publication 117 (CDMG, 1997). The NCEER methods for SPT and CPT analyses update simplified procedures presented by Seed and Idriss (1971). The analysis method compares the cyclic resistance ratio (CRR) with the earthquake-induced cyclic stress ratio (CSR) at different depths due to the estimated earthquake ground motions. The relationship for CSR is presented as follows:

$$CSR = 0.65 (a_{max}/g)(\sigma_{vo}/\sigma'_{vo})r_d$$

where a_{max} is the peak horizontal acceleration at the ground surface generated by an earthquake, g is the acceleration of gravity, σ_{vo} and σ'_{vo} are total and effective overburden stresses, respectively, and r_d is a stress reduction coefficient. CRR is a function of the soil density and grain characteristics.

The factor of safety (FS) against liquefaction is expressed as the ratio of the cyclic resistance ratio (CRR) to the cyclic stress ratio (CSR). If the FS is less than 1.0, the soil is considered to be liquefiable during seismic shaking.

$$FS = CRR/CSR$$

We evaluated the liquefaction potential of the medium dense sand and silt strata encountered using a pseudo-peak horizontal ground acceleration of approximately 0.5g. A discussion of ground shaking is presented in the "Seismicity" sections, below.

Our CPT tip pressures were corrected for overburden and fines content. The CPT method utilizes the soil behavior type index (I_c) and the exponential factor "n" applied to the Normalized Cone Resistance "Q" to evaluate how likely a layer is to contain significant plastic fines and have a low liquefaction potential.

Cyclic Resistance Ratios (CRR) were calculated for CPT methods using normalized "N" values and CPT tip pressures corrected to clean sand values and the SPT and CPT clean sand base curves presented in the NCEER method. The CRRs were then corrected for the design ground water level and magnitude scaling factors. The factor

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of safety against liquefaction is the ratio of the CRR to the CSR (cyclic stress ratio) or seismic demand on a soil layer based on the Seed and Idriss (1971) equation. Estimates of volumetric change and settlement were determined by the Ishihara and Yoshimine (1990) method. As discussed in the SCEC report, differential movement for level ground, deep soil sites, will be on the order of half the total estimated settlement. The results of our analyses are presented below.

Table 1. Results of Liquefaction Analyses – CPT Method

CPT Number	Depth to Top of Layer (feet)	Layer Thickness (feet)	*q _{C1N-CS}	Factor of Safety	Potential for Liquefaction	Estimated Total Settlement (in.)
CPT-1	5.0	0.5	91	0.5	Likely	0.1
	6.7	10.7	88	0.3	Likely	3.4
	22.3	1.0	81	0.3	Likely	0.3
	37.7	0.7	125	0.5	Likely	0.2
	38.7	0.5	125	0.5	Likely	0.1
	40.8	0.5	150	0.8	Likely	0.1
	45.0	0.3	135	0.6	Likely	<0.1
	49.7	0.2	115	0.5	Likely	<0.1
Total =						4½
CPT-2	36.6	0.6	132	0.6	Likely	0.1
	37.6	0.6	141	0.7	Likely	0.1
	38.6	0.2	153	0.8	Likely	<0.1
	40.6	0.4	105	0.4	Likely	<0.1
	44.6	1.2	100	0.4	Likely	0.3
	47.6	1.6	139	0.7	Likely	0.3
Total =						1
CPT-3	49.1	1.6	146	0.8	Likely	0.2
Total =						¼

Our analyses indicate that the silt and sand layers theoretically can liquefy, resulting in about up to about 4½ inches of total settlement. As discussed in the SCEC (1999) report, anticipated differential settlements for level sites with deep sediments will be on the order of half of the total estimated settlements, resulting in differential settlement estimates of about 2¼ inches. Based on work by Youd and Garris (1995), it is our opinion that the relatively thick sand layer encountered in boring EB-1 and CPT-1 between the depths of approximately 7 and 17 feet, has the potential to cause ground rupture and bearing failure of shallow foundations, and the settlement estimate for CPT-1 may be underestimated. If shallow mat foundations are desired for the project, the liquefiable layer will need to be mitigated. Details are discussed in the "Foundations" section of this report.

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3.4 Differential Compaction

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform compaction of soil strata, resulting in movement of the near-surface soils. Because the subsurface soils encountered at the site are generally stiff/medium dense we judge the probability of significant differential compaction at the site to be low.

3.5 Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. In soils this movement is generally due to failure along a weak plane, and may often be associated with liquefaction. There are no creeks or open bodies of water within an appropriate distance from the site for lateral spreading to occur on the site. For this reason, the probability of lateral spreading occurring at the site during a seismic event is low.

4.0 SEISMICITY

4.1 Regional Active Faults

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined, active fault zones of the San Andreas Fault system, which regionally trend in a northwesterly direction. The San Andreas Fault, which generated the great San Francisco earthquake of 1906, passes about 20 kilometers southwest of the site. Two other major faults in the area are the Hayward Fault, located about 8 kilometers northeast of the site, and the Calaveras Fault, located about 12½ kilometers northeast.

4.2 Maximum Estimated Ground Shaking

Maps published by the California Geologic Survey indicated that a pseudo-peak horizontal ground acceleration of about 0.5g has a 10 percent chance of exceedance in 50 years. Pseudo-peak ground acceleration have been normalized to a 7.5 Mw seismic event, weighted to account for regional faults and seismic activity.

4.4 Future Earthquake Probabilities

Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when or where an earthquake will occur. The U.S. Geological Survey's Working Group on California Earthquake Probabilities (2002), referred to as WG02, determined there is a 62 percent chance of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2003 and 2032. This result is an important outcome of WG02's work, because any major earthquake can cause damage throughout the region.

This potential was demonstrated when the 1989 Loma Prieta earthquake caused severe damage in Oakland and San Francisco, more than 50 miles from the fault rupture. Although earthquakes can cause damage at a considerable distance, shaking

will be very intense near the fault rupture. Therefore, earthquakes located in urbanized areas of the region have the potential to cause much more damage than the 1989 Loma Prieta earthquake.

4.5 CBC Site Coefficient

Based on our borings and alluvium thickness maps the site is underlain by stiff soils extending to depths on the order of several hundred feet. The California Division of Mines and Geology (CDMG) has issued maps locating "Active Fault Near-Source Zones" to be used with the 2001 California Building Code ("Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada," CDMG/ICBO February 1998). Faults are classified as either "A," "B," or "C" as shown below. Only faults classified as "A" or "B" are mapped since faults classified as "C" do not increase the near-source factor.

Table 2. Seismic Source Definitions

Seismic Source Type	Seismic Source Description	Seismic Source Definition*	
		Maximum Moment Magnitude, M	Slip Rate, SR (mm/yr)
A	Faults that are capable of producing large magnitude events and that have a high rate of seismic activity.	$M \geq 7.0$	$SR \geq 5$
B	All faults other than Types A and C.	$M \geq 7.0$ $M < 7.0$ $M \geq 6.5$	$SR < 5$ $SR > 2$ $SR < 2$
C	Faults that are not capable of producing large magnitude earthquakes and that have a relatively low rate of seismic activity.	$M < 6.5$	$SR \leq 2$

*Note: Both maximum moment magnitude and slip rate conditions must be satisfied concurrently when determining seismic source type.

The following table lists Type A and Type B faults within 25 kilometers of the site:

Table 3. Approximate Distance to Seismic Sources

Fault	Seismic Source Type	Distance (kilometers)
**Hayward (Southeast Extension)	B	8.0
*Hayward (Main Trace)	A	12.5
Calaveras	B	13.0
Monte Vista - Shannon	B	13.8
San Andreas (1906)	A	20.0
Sargent	B	25.0

*Nearest Type A fault

**Nearest Type B fault

Based on this information, the site may be characterized for design based on Chapter 16 of the 2001 CBC using the information in Table 4 below.

DRAFT**Table 4. 2001 CBC Site Categorization and Site Coefficients**

Categorization/Coefficient	Design Value
Soil Profile Type (Table 16-J)	S_p
Seismic Zone (Figure 16-2)	4
Seismic Zone Factor (Table 16-I)	0.4
Seismic Source Name	Hayward (South)
Seismic Source Type (Table 16-U)	A
Distance to Seismic Source (kilometers)	12.5
*Near Source Factor N_a (Table 16-S)	1.00
Near Source Factor N_v (Table 16-T)	1.10
Seismic Coefficient C_a (Table 16-Q)	0.44
Seismic Coefficient C_v (Table 16-R)	0.70

*Note: For Seismic Zone 4, the near-source factor N_a used to determine C_a need not exceed 1.1 for structures complying with all the conditions within UBC Section 1629.4.2.

5.0 CONCLUSIONS AND DEVELOPMENT CONSIDERATIONS

5.1 Conclusions

From a geotechnical engineering viewpoint the proposed development may be constructed as planned, provided design and construction is performed in accordance with the recommendations presented in this report.

The primary geologic and geotechnical concerns at the site are:

- ▼ Moderately compressible clay soils
- ▼ High liquefaction hazard was identified at CPT-1/EB-1
- ▼ Moderately expansive near surface soil

Based on our estimated column footing loads it appears that static settlements will be relatively high (estimated 1-inch of differential settlement between columns) and it may be impractical for the structural engineer to design the structure to withstand the deflections. Once structural loads are known, we should review the structural layout and loading to see if spread footings may be feasible. To mitigate the settlement potential of the moderately compressible clay soils under static loading, the structure may be supported on a mat foundation (provided the liquefiable soils are mitigated) or alternatively may be supported on pile foundations. Details are discussed in the "Foundations" section of this report.

To mitigate the liquefaction hazard identified in CPT-1 and EB-1 we recommend that the proposed structure be supported on a pile foundation, or alternatively the liquefiable sands may be improved by stone columns, compaction grouting, or other method, and the proposed structure may be supported on a shallow mat foundation. Details are presented in the "Foundations" section of this report.

The expansive near surface soils risks may be mitigated by supporting slabs-on-grade on a layer of non-expansive fill, having foundations bear below the zone of seasonal

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moisture fluctuation, compacting the subgrade at a moisture content above the laboratory determined optimum, constructing pavements and landscaping to drain away from the structure and compacting the subgrade soils at a moisture content above the laboratory optimum.

5.2 Plans, Specifications, and Construction Review

Because subsurface conditions may vary from those predicted by relatively small diameter, widely spaced borings, and to check that our recommendations have been properly implemented, we recommend we be retained to 1) review final construction plans and specifications and 2) observe the earthwork and foundation construction. Also, geotechnical conditions can be affected by the construction process. For the above reasons our geotechnical recommendations are contingent upon our firm providing geotechnical observation and testing services during construction.

6.0 EARTHWORK

6.1 Clearing and Site Preparation

The site should be cleared of all surface and subsurface improvements to be removed and deleterious materials including existing building foundations, slabs, irrigation lines, fills, pavements, debris, designated trees, shrubs, and associated roots. Abandonment of existing buried utilities is discussed below. Excavations extending below the planned finished site grades should be cleaned and backfilled with suitable material compacted as recommended in the "Compaction" section of this report. We recommend that the backfilling be carried out under our observation.

After clearing, any vegetated areas should be stripped to sufficient depth to remove all surface vegetation and topsoil containing greater than 3 percent organic matter by weight. At the time of our field investigation, we estimated that a stripping depth of approximately 3 to 4 inches would be required in vegetated areas. Deeper excavations will be required to remove tree root balls. The actual stripping depth required depends on site usage prior to construction and should be established in the field by us at the time of construction. The stripped materials should be removed from the site or may be stockpiled for use in landscaped areas, if desired.

We recommend that backfilling of holes or pits resulting from demolition and removal of existing building foundations, buried structures or other improvements be carried out under our observation and that the backfill be observed and tested during placement. Alternatively, the loose backfill locations should be carefully documented during demolition for excavation and re-compaction during site grading.

6.2 Removal of Existing Fill

Although fill other than the pavement section was not identified in our explorations. Undocumented fills associated with the existing site development are likely. If undocumented fill is encountered during grading it should be removed down to native soil. If the fill material meets the requirements in the "Material for Fill" section below, it may be reused as engineered fill. Side slopes of fill excavations in building and pavement areas should be sloped at inclinations no greater than 3:1 (horizontal to vertical) to minimize abrupt variations in fill thickness. All fill should be compacted in

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accordance with the recommendations for fill presented in the "Compaction" section of this report.

6.3 Abandoned Utilities

Abandoned utilities within the proposed building area should be removed in their entirety. Utilities within the proposed building area would only be considered for in-place abandonment provided they do not conflict with new improvements, that the ends and all laterals are located and completely grouted, and the previous fills associated with the utility do not pose a risk to the structure.

Utilities outside the building area should be removed or abandoned in-place by grouting or plugging the ends with concrete. Fills associated with utilities abandoned in-place could pose some risk of settlement; utilities that are plugged could also pose some risk of future collapse or erosion should they leak or become damaged. The potential risks are relatively low for small diameter pipes (4 inches or less) abandoned in-place and increasingly higher with increasing diameter.

6.4 Subgrade Preparation

After the site has been properly cleared, stripped, and necessary excavations have been made, exposed surface soils in those areas to receive fill, slabs-on-grade, or pavements should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the recommendations for fill presented in the "Compaction" section. The finished compacted subgrade should be firm and non-yielding under the weight of compaction equipment.

Because the near surface soils have high moisture content, the subgrade may become unstable and require stabilization during construction. Stabilization may include geotextile stabilization fabric and crushed rock, chemical treatment or other methods. If required, an appropriate stabilization should be selected based on the field conditions encountered during construction.

6.5 Material for Fill

All on-site soils below the stripped layer having an organic content of less than 3 percent by weight should be suitable for use as fill at the site. In general, fill material should not contain rocks or lumps larger than 6 inches in greatest dimension, with no more than 15 percent larger than 2½ inches. Imported and non-expansive fill material should be inorganic and should have a Plasticity Index of 15 or less. Imported fill should have sufficient binder to prevent caving of the foundation and utility trenches. Proposed imported fill from a geotechnical viewpoint should be approved by a member of our staff at least four days prior to delivery to the site. Compliance testing for aggregate base may take up to 10 days to complete. In addition, your environmental consultant should approve proposed import soil from an environmental viewpoint.

Consideration should also be given to the environmental characteristics as well as the corrosion potential of imported fill. Laboratory testing, including pH, soluble sulfates, chlorides, and resistivity will provide information regarding corrosion potential. Import soils should not be more corrosive than the native materials.

DRAFT**6.6 Compaction**

All fill, as well as scarified surface soils in those areas to receive fill or slabs-on-grade, should be compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557, latest edition. Fill should be placed in lifts no greater than 8 inches in uncompacted thickness at a moisture content near the at least 1 percent over laboratory optimum. Each successive lift should be firm and non-yielding under the weight of construction equipment.

In pavement areas, the upper 6 inches of subgrade and full depth of aggregate base should be compacted to at least 95 percent relative compaction (ASTM D1557, latest edition). Aggregate base and all import soils should be compacted at a moisture content near the laboratory optimum.

6.7 Wet Weather Conditions

Earthwork contractors should be made aware of the moisture sensitivity of clayey soils and potential compaction difficulties. If construction is undertaken during wet weather conditions, the surficial soils may become saturated, soft and unworkable. Subgrade stabilization techniques might include the use of engineering fabrics and/or crushed rock or chemical treatment. Therefore, we recommend that consideration be given to construction during summer months.

6.8 Trench Backfill

Bedding and pipe embedment materials to be used around underground utility pipes should be well graded sand or gravel conforming to the pipe manufacturer's recommendations and should be placed and compacted in accordance with project specifications, local requirements or governing jurisdiction. General fill to be used above pipe embedment materials should be placed and compacted in accordance with local requirements or the recommendations contained in this section, whichever is more stringent.

On-site soils may be used as general fill above pipe embedment materials provided they meet the requirements of the "Material for Fill" section of this report. General fill should be placed in lifts not exceeding 8 inches in uncompacted thickness and should be compacted to at least 90 percent relative compaction (ASTM D1557, latest edition) by mechanical means only. Water jetting of trench backfill should not be allowed. The upper 6 inches of general fill in all pavement areas subject to wheel loads should be compacted to at least 95 percent relative compaction.

Where relatively higher permeability sand or gravel backfill is used in trenches through lower permeability soils, we recommend that a cut-off plug of low permeability soil be placed where such trenches enter the building and pavement areas. This would reduce the likelihood of water entering the trenches from the landscaped areas and seeping through the trench backfill into the building and pavement areas and coming into contact with expansive subgrade material.

DRAFT**6.9 Temporary Slopes and Trench Excavations**

The contractor should be responsible for all temporary slopes and trenches excavated at the site and design of any required temporary shoring. Shoring, bracing, and benching should be performed by the contractor in accordance with the strictest governing safety standards.

6.10 Surface Drainage

Positive surface water drainage gradients (2% minimum) should be provided within 5 feet of the buildings adjacent to the structures to direct surface water away from foundations and slabs towards suitable discharge facilities. Ponding of surface water should not be allowed on or adjacent to structures, slabs-on-grade, or pavements. Roof runoff should be directed away from foundation and slabs-on-grade. Roof runoff should be carried at least 5 feet away from foundations and slabs in closed conduits and directed to suitable discharge facilities. Downspouts may discharge onto splash-blocks provided the area is covered with concrete slabs or asphalt concrete pavements.

6.11 Landscaping Considerations

As the near-surface soils are moderately expansive, we recommend restricting the amount of surface water infiltrating these soils near structures and slabs-on-grade. This may be accomplished by:

- ▼ Selecting landscaping that requires little or no watering, especially within 3 feet of structures, slabs-on-grade, or pavements,
- ▼ Using low precipitation sprinkler heads,
- ▼ Regulating the amount of water distributed to lawn or planter areas by installing timers on the sprinkler system,
- ▼ Providing surface grades to drain rainfall or landscape watering to appropriate collection systems and away from structures, slabs-on-grade, or pavements,
- ▼ Preventing water from draining toward or ponding near building foundations, slabs-on-grade, or pavements, and
- ▼ Avoiding open planting areas within 3 feet of the building perimeter.

We recommend that the landscape architect incorporate these items into the landscaping plans, and that we review the plans before construction.

6.12 Construction Observation

All grading and earthwork should be performed under the observation of our representative to check that the site is properly prepared, that selected fill materials are satisfactory, and that placement and compaction of fills is performed in accordance with our recommendations and the project specifications. Sufficient notification to us

prior to earthwork is essential. The project plans and specifications should incorporate all recommendations contained in this report.

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7.0 FOUNDATIONS

As discussed previously, structural loads for the project are not yet known. For our evaluation, we have assumed that typical interior columns will have dead plus live loads of about 450 kips. The average areal load for the building is estimated to be about 750 pounds per square foot (psf). From a geotechnical viewpoint, moderately compressible clays and liquefiable sands have been identified as concerns for foundation design. A brief discussion of foundation alternatives is presented in the table below.

Table 5. Foundation Alternative Discussion

Foundation Alternative	Suitability	Notes regarding foundation type
Spread Footings	Marginal- Differential Settlements may be too high, ground improvement recommended in high liquefaction areas Careful design with structural engineer required	Worst liquefiable soils near CPT-1/EB-1 would require improvement to reduce the potential for seismic bearing failure. Due to the compressible clays static settlements are estimated to be relatively high (about 1 inch static + ½ to ¾ - inch seismic differential settlement between adjacent 3,000 psf, 450 kip dead plus live columns) May be difficult to design structure to withstand settlement and deflections Liquefiable soil limits will need to be established after site demolition by additional subsurface exploration
Mat Foundation	Suitable – ground improvement required in high liquefaction area Additional exploration recommended to identify limits of liquefiable area	Liquefiable soils would require improvement under portions of the mat Mat foundation could be designed to resist estimated static and liquefaction settlements Liquefiable soil limits will need to be established after site demolition by additional subsurface exploration
Driven Pile Foundations	Suitable – additional exploration to identify downdrag areas and end bearing layers recommended	Driven piles would reduce potential for static and seismic settlements and would provide support through a combination of skin friction and end bearing Additional deep exploration should be performed to verify end bearing layer continuity Additional exploration would be required to identify liquefiable soil limits for downdrag. Piles need to be designed for post-earthquake induced down drag in liquefiable areas At-grade slabs may experience post-earthquake damage, or alternatively may be structurally supported.

Our initial analysis indicates that a mat foundation or pile foundation system will be most feasible for this project. Spread footings have marginal feasibility from a geotechnical viewpoint because the estimated settlements are high. Additional analysis in conjunction with input from a structural engineer is needed to verify the feasibility of spread footings. Detailed recommendations for a mat foundation with ground improvement, and driven pile foundations presented in the following sections.

7.1 Reinforced Mat Foundations with Ground Improvement

A reinforced mat foundation (with ground improvement for the liquefiable layers encountered in EB-1 and CPT-1) may be used for support of the 5-story apartment building.

The mat may be designed for an average allowable bearing pressure of 750 pounds per square foot (psf) for dead plus live loads, with maximum localized allowable bearing pressures of 2,000 psf at column and wall loads. Allowable bearing pressures may be increased by 1/3 for all loads including wind and seismic. These allowable bearing pressures are net values; the weight of the mat can be neglected for design.

The mat should be reinforced, as appropriate, to provide structural continuity and to help span local irregularities. These recommendations may be revised depending on the particular design method selected by the structural engineer. It is essential that we observe the mat foundation pads prior to placement of reinforcing steel.

For a uniformly loaded mat of 750 psf we estimate that a mat will undergo approximately 1½ inches of settlement due to static loads. At concentrated loads the static settlement may be higher. On a preliminary basis we anticipate that a variable modulus of subgrade reaction ranging from 5 pounds per cubic inch at the center of the mat to 10 pounds per cubic foot at the edge of the mat be used for design. We should be provided with structural contact pressures from a finite element foundation to revise the modulus of subgrade reaction values accordingly.

The modulus of subgrade reaction may be increased over areas that will have ground improvement. Ground improvement recommendations are discussed in the section below.

Once the worst liquefiable layers are improved, we anticipate that post earthquake liquefaction induced settlement will be reduced to about approximately ¾-inch of differential settlement in approximately 50 feet.

7.2 Ground Improvement Below Mat Foundations

Due to the potential for ground rupture and bearing capacity failure of mat foundations supported above the relatively shallow and thick layer of liquefiable soil encountered in EB-1/CPT-1, we recommend that the limits of this layer be determined by additional subsurface exploration and that the layer be improved. Ground improvement methods may consist of construction of stone columns, pressure grout, or soil mixing. Based on the conditions encountered in CPT-1 we anticipate that the improvement depth of about 17 feet would be required. We should review any ground improvement plans and specifications prior to construction

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Typically, ground improvement is designed and constructed by a design-build contractor. We could provide contractor references if desired. We recommend that the sands be improved to an equivalent $N_{1(60-cs)}$ of about 25 to 30 blows per foot or greater or a normalized clean sand CPT tip resistance of 145 to 160 or greater. The ground improvement program should include in situ testing to verify that the ground improvement is working. If stone columns are used, the upper 3 feet of soil beneath the mat may require over excavation and recompaction to form a soil cushion and prevent the development of hard points at stone columns locations beneath the mat. Ground improvement may not mitigate all of the liquefiable layer, however, we judge that improved ground will not cause boils or ground rupture and that differential settlement will be reduced to about $\frac{3}{4}$ -inch in 50 feet due to post earthquake liquefaction settlement.

The intent of limited area ground improvement is to reduce the potential for bearing capacity failure and ground rupture, but not totally eliminate the risk of post-earthquake liquefaction settlement. Several small layers are potentially liquefiable in CPT-2 are not anticipated to be easily improved. As discussed above, the mat should be designed for post-seismic differential settlement of about $\frac{3}{4}$ -inch in 50 feet.

7.3 Moisture Protection Considerations Mats

Although the most of the ground level of the structure is planned to be garage floor, we have included moisture protection considerations for at-grade concrete floors of habitable areas. The long-term performance of concrete mat floor coverings depends to a large degree on good design, workmanship, and materials. The following general guidelines are presented for consideration by the developer, design team, and contractor. The purpose of these guidelines is to aid in producing a concrete mat of sufficient quality to allow successful installation of floor coverings and reduce the potential for floor covering failures due to moisture-related problems associated with mat foundation construction. These guidelines may be supplemented, as necessary, based on the specific project requirements.

- ▼ A minimum 10-mil thick vapor barrier (ASTME E1715 class C or better) should be placed directly below the mat. The vapor barrier should extend to within 12 to 18 inches of the edge of the mat, as determined by the structural engineer. At least 4 inches of free-draining gravel, such as $\frac{1}{2}$ -inch or $\frac{3}{4}$ -inch crushed rock with no more than 5 percent passing the ASTM No. 200 sieve, should be placed below the vapor barrier to serve as a capillary break. The vapor barrier should be sealed at all seams and penetrations.
- ▼ The concrete water/cement ratio should not exceed 0.45. Midrange plasticizers could be used to facilitate concrete placement and workability.
- ▼ Water should not be added after initial batching, unless the slump of the concrete is less than specified, and the resulting water/cement ratio will not exceed 0.45.
- ▼ Polishing the concrete surface with metal trowels should not be permitted.
- ▼ All concrete surfaces to receive any type of floor covering should be moist cured for a minimum of 7 days. Alternatively, properly applied curing compounds may be considered.

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- ▼ Moist curing methods may include frequent sprinkling, or using coverings such as burlap, cotton mats, or carpet. The covering should be placed as soon as the concrete surface is firm enough to resist surface damage. The covering should be kept continuously wet and not allowed to dry out during the required curing period.
- ▼ Water vapor emission levels and pH should be determined as required by the manufacturer's of the floor covering materials before floor installation. Measurements and calculations should be made according to ASTM F1869-98 and F710-98 protocol.

The guidelines presented above are based on information obtained from various technical sources, including the American Concrete Institute (ACI), and are intended to present information that can be used to reduce potential long-term impacts from slab moisture infiltration. The application of these guidelines does not affect the geotechnical aspects of the foundation performance.

7.4 Lateral Loads

Lateral loads may be resisted by friction between the bottom of mats and the supporting subgrade. A maximum allowable frictional resistance of 0.25 may be used for design. In addition, lateral resistance may be provided by passive pressures acting against deepened mats poured neat against competent soil. We recommend that an allowable passive pressure based on an equivalent fluid pressure of 300 pounds per cubic foot (pcf) be used in design. The upper 12 inches of soil should be neglected when determining lateral passive resistance.

7.5 Driven Concrete Piles

A pile foundation will, in our opinion, support the proposed building loads with only minor settlement. Therefore, we recommend that the proposed apartment building be supported on driven, precast, prestressed concrete piles. Conventional slabs-on-grade may be used in conjunction with a pile foundation provided that the subgrade soils consist of properly compacted, engineered fill. Some settlement and cracking of the at-grade slabs should be anticipated after a large earthquake that would require repair. Alternatively, the first level garage floor could be designed to structurally span between pile foundations.

7.5.1 Vertical Loads

CPT-3 indicates that a significantly thick dense sand layer was encountered between the approximate depths of 58 and 68 feet. Our pile capacity estimates below, are based on the assumption that this layer is continuous across the site. If piles are chosen as a preferred foundation alternative, we should perform additional deep exploration to verify the continuity of the dense sand layers prior to final pile design. If the layer is not continuous, piles would have to obtain their capacity from skin friction only. Skin friction piles would need to be longer, and could require predrilling through discontinuous dense sand layers.

As discussed above, additional exploration to verify dense layer continuity and the limit of potentially liquefiable sands is recommended.

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Piles driven through the liquefiable area:

We have estimated maximum column loads on the order of 450 kips for dead plus live loads. We computed allowable downward vertical capacities for 14-inch-square concrete piles. Based on CPT-3, we anticipate that 14-inch concrete piles driven to a depth of approximately 60 feet would have allowable dead plus live capacities of about 170 kips. The indicated capacities are for dead plus live loads. Dead loads should not exceed two-thirds of the computed capacities. The pile capacities may be increased by one-third under transient loading, including wind and seismic. Uplift loads should also not exceed 120 kips. The allowable loads above include a factor of safety of 1.5 since the downdrag is a seismic condition.

Piles driven through the non-liquefiable areas:

We have estimated maximum column loads on the order of 450 kips for dead plus live loads. We computed allowable downward vertical capacities for 14-inch-square concrete piles. Based on CPT-3, we anticipate that 14-inch concrete piles driven to a depth of approximately 60 feet would have allowable dead plus live capacities of about 200 kips where liquefaction and downdrag will not occur. The indicated capacities are for dead plus live loads. Dead loads should not exceed two-thirds of the computed capacities. The pile capacities may be increased by one-third under transient loading, including wind and seismic. Uplift loads should also not exceed 120 kips. The allowable loads above include a factor of safety of 2.

Gross capacity of the piles should not exceed the structural capacity. To effectively minimize pile group effects and reduction in individual pile capacity, piles should be located with a minimum center-to-center spacing of three times the pile width.

We estimate total settlements of less than 1/2-inch to mobilize allowable static capacities. Therefore, post-construction pile foundation settlements of less than 1/2-inch should be considered.

7.5.2 Lateral Loads On Piles

Lateral load resistance for pile-supported structures may be developed through pile bending/soil interaction. The magnitude of the lateral load resistance is dependent upon many factors, including pile stiffness and embedment length, conditions of fixity at the pile cap, the physical properties of the surrounding soils, the tolerable top deflection and the yield moment capacity of the pile.

To estimate lateral capacities of piles, we used a computer program that models the soil response in the form of load-deflection (p-y) curves to estimate the capacity of the piles to resist the expected lateral loads. The lateral load characteristics for 14-inch-square, driven concrete piles with free head and fixed head conditions are presented in the table below.

DRAFT**Table 6. Lateral Pile Response for 14-inch Square Piles**

Head Condition	Deflection (inches)	Developed Shear (kips)	Maximum Moment (ft-kips)	Depth to Maximum Moment (ft)	Depth to First Zero Moment (ft)
Liquefiable Soil Profile					
Fixed	¼	31	100	At pile cap	19
	½	42	155		21
Free	¼	18	40	5	15
	½	25	60	6	17
Non-Liquefiable Soil Profile					
Fixed	¼	41	145	At pile cap	16
	½	58	217		18
Free	¼	21	50	5	13
	½	30	90	6	15

The table represent the probable response of the piles under short-term loading conditions and include no factor-of-safety. Suitable factors-of-safety should be selected on the basis of the type of loading. Pile stiffnesses (EI) of 14.7×10^9 lb-in have been assumed in our calculations of load deflection for the 14-inch piles. A minimum compressive strength of 6,000 pounds per square inch was assumed for concrete modulus calculations. If pile stiffness varies by no more than 20 percent than that reported above, load deflection characteristics can be approximated by multiplying the deflection values by the ratio of the pile stiffness (EI). We should evaluate the response of piles with significantly different stiffness.

The above lateral load characteristics are for single piles and may not be characteristic of the lateral load capacity of piles in a group. Group effects may reduce the allowable lateral load for a given deflection. We recommend that a pile group efficiency of 0.75 be used for pile groups 3-by-3 or smaller. A group reduction would not be necessary for groups of 1 or 2 piles. For pile groups larger than 3-by-3, we recommend that we review the final pile group layout and structural loads to further evaluate the pile group efficiency under lateral loading.

7.5.3 Passive Resistance Against Pile Caps and Grade Beams

If desired, the passive resistance of soil against pile caps and grade beams poured neat against well-compacted engineered fill may be used for lateral resistance. We recommend that an allowable passive pressure based on an equivalent fluid pressure of 300 pounds per cubic foot be used in design.

7.5.4 WEAP Analysis

At a minimum, we recommend that the pile contractor have a wave equation analysis of piles (WEAP) performed to confirm compatibility and driveability of the pile driving system with the pile type and soil conditions at the site. We should review the WEAP results prior to mobilization of pile driving equipment to the site.

7.5.5 Indicator Piles

It has been our experience that uncertainties associated with production pile driving can be reduced considerably by implementing an indicator pile program. An indicator

pile program will also provide a better means of confirming the limits of layers where high driving resistance may be encountered, and to more accurately estimate final pile lengths.

We recommend that at least three indicator piles be installed for each building before the final pile casting lengths have been selected. The indicator piles should be driven with the same equipment that will be used to drive the production piles. We should review or select the indicator pile locations when structural drawings are made available. The indicator pile cast lengths should be based on the design lengths required to meet the desired capacity, plus 5 feet. It is expected that some indicator piles may not be driven to their entire length and will require cutting to provide the desired butt elevation. Indicator piles can be used for support of the structure and, therefore, should be located appropriately. We also suggest that one or more spare piles be delivered to the site during the indicator program.

7.5.6 PDA Monitoring

If desired, a Pile Driving Analyzer (PDA) can be used during the indicator pile program to determine approximate pile capacities through dynamic testing. PDA monitoring may allow a reduction in production pile lengths and thus cost savings to the project. PDA monitoring should be performed during indicator driving and on selected piles for restrikes; restrikes should be performed no sooner than seven days after initial driving. *Restrike testing more than one day after installation may significantly alter the contractor's sequencing. Therefore, if restrike testing is selected for this project, it should be clearly identified on the plans and specifications to avoid unexpected costly change-orders for out of sequence moves.* PDA monitoring would be especially beneficial for checking tensile stresses in the piles and for evaluating pile integrity on any piles suspected of being damaged during indicator or production driving. Piles designated for PDA monitoring during indicator pile installation should be at least 10 feet longer than design length so that the gauges are not driven into the ground.

7.5.7 Production Pile Installation

If indicator piles are installed, the same hammer should be used for both the indicator piles and the production piles. The pile contractor should perform wave equation analysis to confirm the compatibility and driveability of the pile driving system with the pile type and soil conditions at the site. We should review the wave equation results prior to mobilization of pile driving equipment to the site.

Since the piles are designed for skin friction and end bearing support, they should be driven to the desired tip elevation. If difficult driving conditions are encountered, we should review the driving record and evaluate potential tip capacity to allow reduction in pile length. We may also recommend that a Pile Driving Analyzer (PDA) be used during production driving to determine approximate pile capacities through dynamic analyses. PDA monitoring would be especially beneficial for checking restrike capacities of any piles short of required tip elevation or for evaluating pile integrity on any piles suspected of being damaged during driving. We should observe all indicator and production pile installation on a full-time basis.

DRAFT**7.6 Interior Slabs on Grade**

Garage slabs on grade should be constructed as described in the "Portland Cement Concrete Pavement" section below. For interior slabs on grade we recommend that the slabs be supported on at least 18-inches of non-expansive fill. The moisture protection system described above, may be counted as part of the non-expansive fill thickness. Non expansive fill should have a PI of 15 or less as described in the "Material for Fill" section of this report and should be compacted as described in the "Compaction" section of this report.

8.0 RETAINING WALLS**8.1 Lateral Earth Pressures**

Any proposed retaining walls should be designed to resist lateral earth pressures from adjoining natural materials, backfill, and surcharge loads. Provided that adequate drainage is provided as recommended below, we recommend that walls restrained from movement at the top be designed to resist an equivalent fluid pressure of 45 pounds per cubic foot (pcf) plus a uniform pressure of $8H$ pounds per square foot, where H is the distance in feet between the bottom of the footing and the top of the retained soil. Restrained walls should also be designed to resist an additional uniform pressure equivalent to one-half of any surcharge loads applied at the surface. Any unrestrained retaining walls with adequate drainage should be designed to resist an equivalent fluid pressure of 45 pcf plus one-third of any surcharge loads.

The above lateral earth pressures assume level backfill conditions and sufficient drainage behind the walls to prevent build-up of hydrostatic pressure from surface water infiltration and a rise in the ground water level. If adequate drainage is not provided, we recommend an equivalent fluid pressure of 40 pcf be added to the values recommended above for both restrained and unrestrained walls. Damp proofing of the walls should be included in areas where wall moisture and efflorescence would be undesirable.

8.2 Drainage

Adequate drainage may be provided by a subdrain system behind the walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 2 feet out from the wall and to within 2 feet of outside finished grade. Alternatively, $\frac{1}{2}$ -inch to $\frac{3}{4}$ -inch crushed rock may be used in place of the Class 2 Permeable Material provided the crushed rock and pipe are enclosed in filter fabric, such as TCMirafi 140N or equivalent. The upper 2 feet of wall backfill should consist of relatively impervious compacted on-site clayey soil. The subdrain outlet should be connected to a free-draining outlet or sump.

Miradrain, Geotech Drainage Panels, or Enkadrain drainage matting may be used for wall drainage as an alternative to the Class 2 Permeable Material or drain rock backfill. The drainage panel should be connected to the perforated pipe at the base of the wall.

8.3 Backfill

Backfill placed behind the walls should be compacted to at least 90 percent relative compaction using light compaction equipment. If heavy compaction equipment is used, the walls should be temporarily braced.

8.4 Foundation

Landscape retaining walls up to about 5 feet high may be supported on a continuous spread footings with an allowable dead plus live bearing capacity of 2,000 psf. This bearing pressure may be increased by 1/3 for all loads including wind and seismic. The retaining wall may experience significant distress after an earthquake if supported in highly liquefiable site areas, if the ground remains unimproved. Alternatively, the walls may be supported on pile foundations or on improved ground. Lateral load resistance for the walls may be developed in accordance with the recommendations presented in the "Lateral Loads" section.

All retaining walls that are part of the apartment structure should be supported on the same foundation type as the main apartment structure

9.0 PAVEMENTS

9.1 Asphalt Concrete

We obtained a representative bulk sample of the surface soil from the parking area and performed an R-value test to provide data for pavement design. The results of the test are included in Appendix B and indicate an R-value of 10. Because surface soils vary across the site, we judged an R-value of 5 to be applicable for design. Using estimated traffic indices for various pavement-loading requirements, we developed the following recommended pavement sections based on Procedure 608 of the Caltrans Highway Design Manual, presented in Table 7.

**Table 7. Recommended Asphalt Concrete Pavement Design Alternatives
Pavement Components
Design R-Value = 5**

General Traffic Condition	Design Traffic Index	Asphalt Concrete (Inches)	Aggregate Baserock* (Inches)	Total Thickness (Inches)
Automobile Parking	4.0	2.5	7.5	10.0
	4.5	2.5	9.5	12.0
Automobile Parking Channel	5.0	3.0	10.0	13.0
	5.5	3.0	12.0	15.0
Truck Access & Parking Areas	6.0	3.5	12.5	16.0
	6.5	4.0	14.0	18.0

The traffic indices used in our pavement design are considered reasonable values for the proposed development and should provide a pavement life of approximately 20 years with a normal amount of flexible pavement maintenance. Because the native soils at the site are moderately to highly expansive, some increased maintenance and

reduction in pavement life can be expected. The traffic parameters used for design were selected based on engineering judgment and not on information furnished to us such as an equivalent wheel load analysis or a traffic study.

9.2 Portland Cement Concrete Pavements

Recommendations for Portland Cement Concrete (PCC) pavements are presented below in Table 8. Since the expected Average Daily Truck Traffic (ADTT) is not known at this time, we have provided alternatives for minimum pavement thickness. An allowable ADTT should be chosen that is greater than expected for the development.

Table 8. Recommended Minimum PCC Pavement Thickness

Allowable ADTT	Minimum PCC Pavement Thickness (inches)
0.8	5
13	5½
130	6

Our design is based on an R-value of 5 and a 28-day unconfined compressive strength for concrete of at least 3,500 pounds per square inch. In addition, our design assumes that pavements are restrained laterally by a concrete shoulder or curb and that all PCC pavements are underlain by at least 6 inches of Class 2 aggregate base. We recommend that adequate construction and control joints be used in design of the Portland Cement Concrete pavements to control the cracking inherent in this construction.

9.3 Pavement Cutoff

Because the native soils at the site are moderately to highly expansive, surface water infiltration beneath pavements could significantly reduce the pavement design life. While the amount of reduction in pavement life is difficult to quantify, in our opinion, the normal design life of 20 years may be reduced to less than 10 years. Therefore, long-term maintenance greater than normal may be required.

To limit the need for additional long-term maintenance, it would be beneficial to protect at-grade pavements from landscape water infiltration by means of a concrete cut-off wall, deepened curbs, redwood header, "Deep-Root Moisture Barrier," or equivalent. However, if reduced pavement life and greater than normal pavement maintenance are acceptable, the cutoff barrier may be eliminated. If desired to install pavement cutoff barriers, they should be considered where pavement areas lie downslope of any landscape areas that are to be sprinklered or irrigated, and should extend to a depth of at least 4 inches below the base rock layer.

9.5 Asphalt Concrete, Aggregate Base and Subgrade

Asphalt concrete and aggregate base should conform to and be placed in accordance with the requirements of Caltrans Standard Specifications, latest edition, except that ASTM Test Designation D1557 should be used to determine the relative compaction of the aggregate base. Pavement subgrade should be prepared and compacted as described in the "Earthwork" section of this report.

accordance with the "Portland Cement Concrete Pavements" section of this report.

9.6 Exterior Sidewalks

We recommend that exterior concrete sidewalks be at least 4 inches thick and underlain by at least 6 inches of Class 2 aggregate base compacted to a minimum of 90 percent relative compaction in accordance with ASTM Test Method D1557, latest edition. If sidewalks are subject to wheel loads, they should be designed in accordance with the "Portland Cement Concrete Pavements" section of this report.

10.0 LIMITATIONS

This report has been prepared for the sole use of Essex Property Trust, Inc., specifically for design of the 90 Archer Street Project in San Jose, California. The opinions presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in the San Francisco Bay Area at the time this report was written. No warranty, expressed or implied, is made or should be inferred.

The opinions, conclusions and recommendations contained in this report are based upon the information obtained from our investigation, which includes data from widely separated discreet locations, visual observations from our site reconnaissance, and review of other geotechnical data provided to us, along with local experience and engineering judgment. The recommendations presented in this report are based on the assumption that soil and geologic conditions at or between borings do not deviate substantially from those encountered or extrapolated from the information collected during our investigation. We are not responsible for the data presented by others.

We should be retained to review the geotechnical aspects of the final plans and specifications for conformance with our recommendations. The recommendations provided in this report are based on the assumption that we will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, TRC Lowney cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of TRC Lowney' report by others. Furthermore, TRC Lowney will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services and/or at the time another consultant is retained for follow up service to this report.

The opinions presented in this report are valid as of the present date for the property evaluated. Changes in the condition of the property will likely occur with the passage of time due to natural processes and/or the works of man. In addition, changes in applicable standards of practice can occur as a result of legislation and/or the broadening of knowledge. Furthermore, geotechnical issues may arise that were not apparent at the time of our investigation. Accordingly, the opinions presented in this report may be invalidated, wholly or partially, by changes outside of our control. Therefore, this report is subject to review and should not be relied upon after a period of three years, nor should it be used, or is it applicable, for any other properties.

DRAFT

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* * * * *

APPENDIX C:

Phase I



PHASE I ENVIRONMENTAL SITE ASSESSMENT

**VACANT OFFICE PARK
90 ARCHER STREET
SAN JOSE, CALIFORNIA**



Prepared for:

**ESSEX PROPERTY TRUST, INC and
ESSEX PORTFOLIO L.P.**
925 East Meadow Drive
Palo Alto, California 94303

Versar Project No. 105071.5071.092

October 18, 2005

• **SACRAMENTO AREA OFFICE** •

7844 MADISON AVENUE, SUITE 167 • FAIR OAKS, CA 95628 • TELEPHONE (916) 962-1612 FAX (916) 962-2678



PHASE I ENVIRONMENTAL SITE ASSESSMENT

**VACANT OFFICE PARK
90 ARCHER STREET
SAN JOSE, CALIFORNIA**


Prepared for:


**ESSEX PROPERTY TRUST, INC.,
ESSEX PORTFOLIO L.P., and
Its Affiliates, Successors, and Assigns
925 East Meadow Drive
Palo Alto, California 94303**

Versar Project No. 105071.5071.092

October 18, 2005

This document has been prepared in accordance with accepted scientific and engineering practices and procedures and Versar, Inc.'s Quality Assurance Program.

Prepared by:  10/18/05
For Julie Cobb Date
Environmental Scientist

Approved by:  10/18/05
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EXECUTIVE SUMMARY

Versar, Inc. (Versar) performed a Phase I Environmental Site Assessment (ESA) of a vacant office building located at 90 Archer Street, San Jose, California (Site). This report has been prepared to conform with the scope and limitations of the American Society for Testing and Materials Standard Practice E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, and Essex Property Trust's Scope of Services for conducting ESAs. Essex may rely upon the extent, character and conclusions of the report.

The scope of work for this project included a visual inspection of the Site, performed on October 3, 2005; review of pertinent background and historical information; contact with appropriate regulatory agencies; prior ownership review; review of chemical and waste handling, storage, and disposal practices, if applicable; observation of land use on surrounding properties; review of a regulatory database report; and photographic documentation of the Site.

The Site is located in the city of San Jose, Santa Clara County, California (Site). The Assessor's Parcel Number for the Site is 235-02-015. The approximately 0.66-acre Site parcel is relatively flat and rectangular in shape. The Site is improved with a two-story office building, a storage shed, fenced-in asphalt-paved parking areas and landscaping. Constructed in approximately 1980, the Site building is a concrete tilt-up structure on a slab-on-grade foundation with glass and concrete exterior, and a flat, built-up, membrane roof. Landscaping, consisting of trees, bushes, and flowering plants, is located throughout the Site.

Versar conducted a survey for asbestos-containing building materials (ACBM) on October 3, 2005. Several ACBMs were identified and should be properly abated and disposed of prior to disturbance of these materials, including building demolition activities. Specific results of this survey were provided to Essex under separate cover.

According to historical topographic maps, prior land use included agricultural use as an orchard, suggesting various pesticides may be present in shallow Site soils. Versar recommends a soil screening survey for the presence of these chemicals.

According to the Environmental Data Resources, Inc. (EDR) report, the Site address is not listed on state or federal databases. Based on Versar's review of the federal and state databases, all adjacent facilities listed on the databases are either a significant distance from the Site with respect to groundwater flow direction, or the chemicals of concern or site status are such that recognized environmental conditions which could adversely impact the Site were not identified.

Based on the Site visit, discussions with knowledgeable parties, and a review of available information, it is Versar's opinion that there are no recognized environmental conditions at the Site as defined in ASTM Practice E1527-00 at the Site. Based on the information reviewed by Versar and contained in this report, Versar recommends the following:



1. Use of the Site as an environmental consultant chemical laboratory was identified in SJFD files. The Site was occupied by Emcon from approximately 1980 to at least 1985. Numerous small quantity chemicals of all types were used in the laboratory. Versar did not identify documented evidence of a release of these chemicals; however, Versar recommends evaluation of the subsurface adjacent to the sewer lines for evidence of laboratory chemicals release.
2. Use of the Site for dryland agriculture during the 1950s and early 1960s suggests organochlorine pesticides, such as DDT and hexachlorobenzene, may be present in shallow Site soils. In addition, copper and copper-based compounds were often applied to orchards. Versar recommends a soil screening survey for the presence of these chemicals.
3. ACBMs identified and discussed in Versar's separate report must be properly abated and disposed of prior to disturbance of these materials.

This Executive Summary is presented for convenience only and should not be used in lieu of information presented in the entire report.



1.0 INTRODUCTION

Versar, Inc. (Versar) performed this Phase I Environmental Site Assessment (ESA) of a vacant office building located at 90 Archer Street, San Jose, Santa Clara County, California (Site), in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, and Essex Property Trust's Scope of Services for conducting ESAs.

The purpose of this report is to identify "recognized environmental conditions" in connection with the Site. The ASTM Standard Practice E1527-00 defines "recognized environmental conditions" as the following:

The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures of the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimus conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The scope of work for this project included a visual inspection of the Site, performed on October 3, 2005; review of pertinent background and historical information; contact with appropriate regulatory agencies; prior ownership review; review of chemical and waste handling, storage, and disposal practices, if applicable; observation of land use on surrounding properties; review of a regulatory database report; and photographic documentation of the Site.

1.1 Deletions and Deviations from ASTM Standard Practice E1527-00

It was the intent of the ESA to make all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practices. This ESA did not deviate from requirements set forth in the ASTM Standard Practice E1527-00.

2.0 BACKGROUND INFORMATION

2.1 Site Description

The Site office building is located in the city of San Jose, Santa Clara County, California (Site). The Assessor's Parcel Number for the Site is 235-02-015. The approximately 0.66-acre Site is relatively flat and rectangular in shape. The Site is improved with a two-story office building, a storage shed, fenced-in asphalt-paved parking areas and landscaping.

Constructed in approximately 1980, the Site building is concrete slab-on-grade foundation with glass and concrete exteriors, and a flat, built-up, membrane roof. Landscaping, consisting of trees, bushes, and flowering plants, is located throughout the Site. The Site is zoned for commercial use. The location of the Site is shown in Figure 1, *Site Location Map*, Figure 2, *Site Aerial Photograph*, and Figure 3, *Site Vicinity Plan*. Photographic documentation is presented in Appendix A. Site improvements are discussed in Section 3.1 of this report.

2.2 Current Site Use

The Site consists of one parcel of land improved with a two-story office building, a storage shed, and approximately 40 parking spaces in an asphalt-paved parking lot. Approximately 90 percent of the parking lot is enclosed with a chain-link fence. Landscaping surrounds most of the perimeter of the parcel. The Site building is a vacant office building that has two restrooms on the ground level and a break room on the second floor. A mop room with a utility sink is located near the ground-level restrooms, as is a general purpose sink and counter area. The building is accessible via four doors, one on each side of the rectangular building. The Site building's roof was accessed via a permanent ladder on the south side of the building.

A storage shed is located behind the Site buildings. At the time of Versar's Site visit, the shed was used to store approximately 10 gallons of paint in plastic paint containers, and fluorescent light bulbs. A three-foot tall stack of roof shingles was stored outside the shed, similar to the roofing products observed on the roof of the Site building.

2.3 Utilities

According to a former employee, Mr. Sam Zullo, who had occupied the building, electricity and gas are provided to the Site by Pacific Gas & Electric (PG&E). When the Site was occupied, garbage was collected on-Site. Versar observed a dumpster enclosure on the south side of the Site building, within the fenced-in parking area. The San Jose Municipal Water System provides drinking water services to the Site.

2.4 Topography, Geology, and Groundwater

Topography of the Site and surrounding area is generally flat. According to the United States Geological Survey (USGS) 7.5-minute series topographic map of San Jose West, California



Quadrangle, the Site is approximately 49 feet above mean sea level (msl). Based on the USGS topographic map, the nearest body of water is the Guadalupe River, located approximately 2,500 feet west of the Site. The topographic gradient at the Site is northerly. In general, groundwater is anticipated to follow surface topography and flow north to northwesterly.

Based on Environmental Data Resources, Inc. (EDR) Radius Map with GeoCheck, soil underlying the Site is described as Botella clay loam, with moderate infiltration rates.

2.5 Floodplains and Wetlands

The Site is located within an 100-year flood hazard zone, based on FEMA floodplain maps. Wetlands are jointly defined by the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers as “those areas that are inundated or saturated by surface or groundwater for a duration and frequency sufficient to support and under normal circumstances do support a prevalence of vegetation adapted for life in saturated soil conditions.” According to the EDR report, wetlands are not located on-Site.

2.6 Current Surrounding Land Use

The Site consists of one parcel of land improved with a single two-story office building. The Site is located in an area developed with residential, commercial, and light-industrial properties. The surrounding property uses were noted:

- North: The Site is bordered to the northwest by Archer Street, followed by a multi-family residential complex, the Waterford Place Apartments.
- East: The Site is bordered to the east by Kerley Drive, beyond which is a computer software company (Stivant, Inc.) at 1604 Kerley Drive, and two unidentified buildings at 1590 and 1580 Kerley Drive. An internet search indicated that these buildings are occupied by Tavolacchi Manufacturing Company and Fish & Seafood wholesalers, respectively.
- South: The Site is bordered to the south by a fenced-in, asphalt-paved, parking lot, accessible from North 1st Street. Additional fenced-in parking lots were observed farther south of this lot.
- West: The Site is bordered to the west by the Homestead Studio Suites Hotel, which abuts Archer Street and North 1st Street. The parking lot to the south of the Site appears to be allotted for this business. West of the hotel is North 1st Street and the accompanying light rail service line in the center of North 1st Street.

2.7 Prior Site and Surrounding Land Use

2.7.1 Historic Aerial Photographs

Versar ordered historical aerial photographs of the Site and surrounding properties from EDR. Aerial photographs for the years 1939, 1956, 1965, 1974, 1982, 1993, and 1998 were provided for review. The following is Versar's review of these aerial photographs. The complete EDR-Aerial Photography Print Service Report is presented in Appendix B.

The Site boundaries could not be determined in the 1956 and 1939 photographs, due to lack of modern roads, structures, or landmarks. Only a portion of the Site is depicted on the 1939 photograph. The Site area in 1939 is occupied by an orchard. The Site area appears undeveloped in the 1956 photograph. A residence is visible north of the Site area and an orchard is visible south of the Site and potentially on the south side of the Site. A residential development is depicted south of the Site area.

In the 1965 photograph, the Site appears undeveloped. Archer Street is a dirt road and Kerley Drive is not depicted. Small structures or vehicles are visible on adjacent properties to the south and west. Vacant land is located north and east of the Site. Commercial buildings are visible in the surrounding area.

The Site appears undeveloped in the 1974 photograph. The adjacent properties west and south of the Site appear to be parking lots. The properties east and north of the Site are undeveloped.

The Site appears developed with the current office building and paved parking in the 1998, 1993, and 1982 photographs. The property located north of the Site across Archer Street is depicted as vacant land in the 1982 and 1993 photographs, and under construction in the 1998 photograph. Homestead Studio Suites Hotel, currently located adjacent to the west side of the Site, is not visible in the 1982 and 1993 photographs.

2.7.2 Historic Topographic Maps

Versar obtained historical topographic maps of the Site and surrounding properties for the years 1953, 1961, 1961-1968, 1961-1973, and 1961-1980 from the EDR Historical Topographic Map Report. The following is Versar's review of these topographic maps. The complete topographic map report is presented in Appendix B.

In the 1953 topographic map the Site is depicted as an orchard. No structures are located on the Site nor are roadways depicted adjacent to the Site. North 1st Street is depicted approximately 500 feet west of the Site and North 4th Street is depicted approximately 500 feet east of the Site. Two structures are depicted next to North 1st Street, surrounded by orchards, approximately 500 feet southwest of the Site. Property west, south, and east of the Site is depicted as orchard with the property to the north depicted as undeveloped.



Similar to the 1953 map, the 1961 map depicts the Site as an orchard with an additional structure southwest of the Site approximately 500 feet and a structure east-southeast of the Site approximately 500 feet. Orchards south of the Site appear to be cleared with some of the nearby properties developed with structures.

The 1968 and 1973 topographic maps show the Site as undeveloped, with Archer Street depicted along the northern boundary of the Site and Kerley Drive depicted along the eastern boundary of the Site. A structure is depicted on the adjacent property to the south-southwest, along North 1st Street. A small structure is depicted on the adjacent property to the west, along North 1st Street. In general, the surrounding areas appear to be developing. Property immediately north of Archer Street has still not been developed.

The 1980 topographic map shows the Site as developed with a single structure. Several structures are depicted east of the Site, east of Kerley Drive. A large structure is depicted adjacent to the Site to the south-southwest, replacing four structures depicted in earlier maps. Property immediately north of Archer Street is still undeveloped.

No recognized environmental conditions that could pose an environmental threat to the Site were identified in the reviewed topographic maps. The Site appears to have been orchard, vacant undeveloped land, and developed into its present-day layout. Apparent use of the Site for dryland agriculture and orchard for several years during the 1950s and early 1960s suggests organochlorine pesticides, such as DDT and hexachlorobenzene, and copper-based compounds may be present in Site soils. Versar recommends a soil screening survey for the presence of these chemicals if the structure and pavement are removed from the Site. No additional topographic map review is recommended.

2.8 Current and Prior Ownership Review

A Chain-of-Title report was ordered from National Environmental Title Research (NETR) in Tempe, Arizona. According to the Title Report, the Site, since August, 2005, has been and is currently jointly owned by Sam J. Zullo and Lorraine H Zullo, Trustees (as to 33 1/3% interest), Aumack Family Limited Partnership (as to 33 1/3% interest), Richard Tanaka and Junko Tanaka, Trustees (as to 23 2/3% interest), and Phillip R. Savio and Debra J. Savio, Trustees (as to 10 2/3% interest).

The following table summarizes the Chain-of-Title report:

<u>Year</u>	<u>Grantor</u>	<u>Grantee</u>
1960	Patrick A. Peabody (acquired in August, 1960); Earl T. Fischer and Bernett V. Fischer, Willis E. Dutton and Roth C. Dutton, Walter L. Jensen and Alba S. Jensen (note: the title was acquired prior to 1940)	City Title Insurance Company

<u>Year</u>	<u>Grantor</u>	<u>Grantee</u>
1963	City Title Insurance Company	Patrick H. Peabody, A. W. Haeasli and Ragna S. Haeasli, Anthony J. Anastasi and Genevieve A. Anastasi, John Paz and Helen Paz, Hans C. Sorensen and Vera Sorensen, Charles Bedolla and Janet L. Bedolla
1965	Patrick H. Peabody, A. W. Haeasli and Ragna S. Haeasli, Anthony J. Anastasi and Genevieve A. Anastasi, John Paz and Helen Paz, Hans C. Sorensen and Vera Sorensen, Charles Bedolla and Janet L. Bedolla	R.C. Johnson Realty Company
1967	R.C. Johnson Realty Company	Reynold C. Johnson Company
1973	Reynold C. Johnson Company	Vorelco of California, Inc.
1978	Vorelco of California, Inc	Kerley Associates
1979	Kerley Associates	Archer Business Complex
1985	Archer Business Complex	Ringwood and Associates
1985	Ringwood and Associates	Zafts Office Complex

No leases or environmental liens were found on record for the Site. The historic chain of title report is included in Appendix C.

2.9 City Directories and Fire Insurance Maps

2.9.1 City Directories

Versar obtained the EDR-City Directory *Abstract* from EDR for the Site address 90 Archer Street, which includes searches from the year 1922 through 2001, at approximate five year intervals. According to EDR, the Site address was not listed in the R.L. Polk & Co. Directory from 1922 through 1978. In 1980 and 1985 the Site address was listed in the Pacific Bell White Pages as Emcon Associates. Also in 1985, the Site was listed as Emcon Associates Chemical Laboratories and Gary A. Tomkins & Associates. Listings for the Site in 1986 and 1991 generally appear to be civil engineering firms, including Mark Thomas & Co, Inc., which is listed again in 2000.

Although the EDR-City Directory *Abstract* lists properties located on South 1st Street, these properties are located approximately 2.5 miles south of the Site, on the south side of E. Santa Clara Street, the divider street differentiating “north” and “south”-named roadways in San Jose.

Nearby street listings from 1955 until 2000 are generally commercial or residential. The EDR-City Directory *Abstract* is presented in Appendix C. The following are specific occupants of several listed addresses.

Versar^{INC}

Archer Street

- 130 Archer Street: HJS & E Engineering (1996)
- 140 Archer Street: Demarcov's Automotive Repair, Happy Vans (customized automotive repair), and Tru-Color Concepts (automotive-related) (1996)
- Automotive repair (2000)

North 1st Street

- 1550 North 1st Street: La Casa Siesta Motel (1955, 1960, and 1963)
- E-Z-8 Motel (1996)
- 1560 North 1st Street: Bob Lewis Volkswagen (1980, 1985, and 1986)
- 1510 North 1st Street: American International Rent-a-Car & Leasing (1985 and 1986)

North 4th Street

- 1500 North 4th Street: State Highway Patrol (1955, 1957 and 1960)
- "Calif State of Contd. Stevens Creek. Forest Fire Station" (1957)
- Bucyrus Blades Inc. and Stiegele Tractor Co. (1963)
- Pest control/termite businesses are (1966 until 1991)
- Smile Catering, Inc. (1980)
- 1560 North 4th Street: Taylor's Dog and Cat Hospital (1955, 1957, 1960, and 1963)
- Vacant (1966)
- Fourth Street Animal Hospital of San [Jose] and Mr. Kenneth S Grooming (dog grooming and boarding) (1970)
- Taylor Made Copy Systems, Inc. (1980)
- Perfect Printing Co., Inc. (1991)
- 1505 North 4th Street: International Harvester Company motor truck division (1960, 1963, 1966, 1970, 1975, 1980, and 1986)
- Garden State International Trucks, Inc. (sales and service) (1986 and 2000)
- 1572 North 4th Street: "AM Mfrs Optical Instruments" and "Swift Instruments Intl South" (1960)
- 1580 North 4th Street: "Thermo Fax Sls Corp Dup Machs" (1960)
- 1600 North 4th Street: Charles Bruning Co. (duplicating equipment) (1960, 1963, and 1966)
- Custom Carpets of California (1970)
- 1610 North 4th Street: Great Western Furniture Co. (1960, 1963, 1966, 1970, and 1975)
- 1695 North 4th Street: Hertz Truck Rental Service (1963, 1966, 1970, 1975, 1985, 1986, 1991, and 1996)
- 1516 North 4th Street: Frank Edwards Co. (automotive division) and Pacific Power Equipment Co. (industrial air engines) (1966)
- 1705 North 4th Street: Ditto (machines) Inc. (1966)
- Echo Precision Films Co. (photography) (1975)
- 1518 North 4th Street: Print N Mail Service Center in (1970)
- Geri's Beauty Salon (1975)
- 1585 North 4th Street: Best Tank Company, Hilary Graphics, Ocean Press, Patty Quinns Fashion Designers, Ltd., Sunrise Printing (1980)
- Multiple businesses including A Precision Machining Co., AMC Printing, and Happy Vans (automotive customizing shop) (1985)

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The Phone Company (1986)

AMC Printing and other tenants (1986)

ABC Printing and Happy Vans (1991)

1740 North 4th Street: Coast Counties Truck & Equipment Co. and Peterbilt Motors Co.
(distributor) (1980, 1986, and 1991)

1750 North 4th Street: Pozas Brothers' Trucking Co. (1986 and 1991)

2.9.2 Sanborn® Fire Insurance Maps

Sanborn maps may show the location of underground storage tanks (USTs), locations of underground pipelines, and types of buildings and industrial activities on properties. Sanborn maps were not available for the Site from EDR or the San Jose Public Library. The Sanborn Map “No Coverage” letter from EDR is included in Appendix C.

2.10 Prior Assessments

Versar was not provided with any previous assessments for the Site.

3.0 INVESTIGATIVE FINDINGS

A visual inspection of the Site was performed by Versar representative, Ms. Julie Cobb, on October 3, 2005. The Site was examined for visible evidence of aboveground storage tanks (ASTs), USTs, and other types of containment or drainage facilities, such as pipes, drums, sumps, ponds, floor drains, dry wells, or leach fields, into which hazardous substances may have been placed. As conditions permitted, the Site was inspected for visual indications of dumping, staining of soils and paved surfaces, odors, distressed vegetation, and other evidence suggesting the possible presence of hazardous substances. The survey included an investigation of reasonably accessible portions of the Site and the Site's perimeter. The following sections discuss the findings of the Site reconnaissance.

3.1 Site Improvements

The Site is improved with a single, two-story office building, storage shed, asphalt-paved parking and landscaping. The approximately 0.66-acre Site is relatively flat and rectangular in shape. The Site building contains an electrical closet, two restrooms, a janitorial closet with utility sink, a break room with a kitchenette. The building is not served by an elevator. Heating, ventilating and air-conditioning (HVAC) equipment was located on the building's roof.

Constructed in approximately 1980, the Site building is a concrete structure on a slab-on-grade foundation with concrete and glass exteriors, and a flat, built-up, membrane roof. Landscaping, consisting of trees, flowers, and bushes, is located around the perimeter of the Site. Paved parking is located west and south of the building, with approximately 35 of the 40 parking spaces enclosed with a chain-link fence.

A storage shed, measuring approximately five feet by six feet, was located on the south side of the Site building, on the Site's asphalt-paved parking lot.

Versar observed no evidence of potable drinking water wells or septic systems, monitoring wells, areas exhibiting signs of stressed vegetation, wastewater discharges, burial activities, roads or trails with no apparent outlet or purpose, dry wells, unusual or noxious odors, or large-scale industrial or manufacturing activities on the Site.

No evidence of the above-mentioned activities or conditions was noted on the other adjacent properties.

3.2 Hazardous Materials Use and Storage

Based on the EDR report and Versar's Site inspection, hazardous wastes are not generated at the Site. The Site is not listed on any of the state or federal databases. Approximately eight gallons of paint were observed stored in a storage shed on the south side of the Site building. According to the Site's historical interviewee, Mr. Sam Zullo, unused paint from interior wall-painting



activities were stored in this shed. The paint containers appeared intact with no leaks or spills observed in the vicinity.

Mr. Zullo also stated that housekeeping and maintenance activities were out-sourced and related chemicals were not stored on-Site during his association with the Site.

Versar observed no evidence of spills or releases of chemicals at the Site.

3.3 Waste Disposal

A single dumpster was observed contained in a concrete block enclosure on asphalt paving, near the southwest corner of the Site building. Evidence of dumping activities adversely impacting the Site was not observed at the containment area.

3.4 SARA

The regulations pursuant to the Superfund Amendments and Reauthorization Act of 1984 (SARA) require that selected businesses file standard reports dealing with the storage, handling, and release of certain listed hazardous substances. The current use of the Site precludes the need to file Tier I, Tier II, or Form R reports for the use, storage, or discharge of hazardous substances.

3.5 Underground Storage Tanks (USTs)

The Versar Site visit included a visual inspection of the entire Site for evidence of UST systems such as vents, fill pipes, fill ports, or unexplained concrete patching. Visual evidence of existing USTs was not observed on the Site, and Mr. Zullo confirmed that he was not aware of the existence of USTs at the Site.

3.6 Aboveground Storage Tanks (ASTs)

Versar's Site visit included a visual inspection of interior and exterior portions of the Site for the presence of ASTs. There was no visual evidence of ASTs existing at the Site. Versar's research did not identify any records of prior ASTs at the Site, and Mr. Zullo confirmed that he was not aware of the presence of USTs at the Site.

3.7 Discharges to Water

Versar did not observe water discharges from the Site that would require pretreatment or a National Pollution Discharge Elimination System (NPDES) permit, or other federal, state, or local permit or approval. There are no activities on the Site with a Standard Industrial Classification (SIC) code that would require filing an application for an NPDES storm water permit. Storm water generally drains from the paved portions and into drains located along the Site roadways and then into the city storm water system. There was no evidence of spills, or



releases of hazardous materials to the public storm water drains located on the Site. Two storm drains were located on the Site, next to sidewalks, near the northwest corner of the Site property and on the eastern side of the Site.

3.8 Air Emissions

There are currently no air emission sources at the Site that are regulated by federal, state, and/or local regulatory agencies. Versar observed no point sources of air emissions at the Site. There were no observed operations at the Site, and no noxious odors were noted by Versar during the Site visit. Versar contacted the Bay Area Air Quality Management District (BAAQMD) to obtain information regarding permits, notices of violations, and an emission summary for the Site. The BAAQMD has no records for the Site.

3.9 Asbestos-Containing Materials

The EPA banned the manufacture, installation, and processing of spray-on insulation and fireproofing in 1972. The application of spray-on material for fireproofing and insulation was banned by the EPA in 1973. The EPA banned molded and wet applied asbestos in 1975, and asbestos-containing materials (ACMs) in mechanical system insulation (e.g., pipe and elbow pipe insulation and boiler insulation) were banned in 1976. ACMs in acoustical and decorative applications were banned by the EPA in 1978 and the three-staged phase out of non-friable ACMs in construction materials began in 1990, but has not been fully implemented.

Based on the planned demolition of the Site building, Versar performed inspection of the Site to identify ACMs on October 3, 2005. This inspection included an examination of accessible interior and exterior areas of the Site building. Versar identified several ACMs at the Site including materials such as resilient sheet flooring, sink undercoating, and roofing materials. The results of the inspection have been provided to Essex under separate cover.

3.10 Polychlorinated Biphenyls (PCBs)

Electrical Transformers

Versar observed one pad-mounted transformer located at the Site, near the southeast corner of the property. The transformers observed by Versar did not appear to be labeled as "non-PCB" containing, but did appear to be in good condition with no noticeable signs of stains or leaking. The transformer is owned and maintained by PG&E. Specific information regarding the PCB content in the transformer was not available. However, in the event that the transformers should malfunction or leak, the transformers and associated problems would be the responsibility of PG&E. Based on this information, the on-Site transformer is not considered to be an environmental concern for the Site.

Fluorescent Light Ballasts

Fluorescent light fixtures are present throughout the Site building. The fluorescent fixtures observed during the Site visit appeared to be in good condition without any signs of leakage. The use of PCBs as a dielectric fluid in fluorescent light ballasts manufactured after 1979 is prohibited by U.S. EPA regulations. Light ballasts manufactured after 1979 are required to be labeled "No PCBs." Based on the construction date of the Site building (1980), it is possible that fluorescent light ballasts at the Site contain PCBs. Ballasts without a "No PCBs" label should be disposed of properly.

3.11 Lead in Paint

Lead-based paint is defined by the federal Toxic Substances Control Act as containing 5,000 parts per million (ppm), or greater than 0.5 percent lead. Lead-free paint is defined by the Consumer Product Safety Act (CPSA) containing less than 0.06 percent (600 ppm) lead by weight. Versar did not observe the presence of peeling or flaking paint in the interiors of the buildings. In general, all painted surfaces appeared to be in good condition. Based on the construction date of the Site buildings (1980), lead in paint is not anticipated to pose an environmental threat to the Site.

3.12 Lead in Drinking Water

Lead in drinking water is regulated by the U.S. EPA under the Safe Drinking Water Act (SDWA) of 1974. U.S. EPA's commercial and public building guidelines recommend mitigative actions be taken for lead levels in excess of 15 parts per billion (ppb) in drinking water. These standards are intended for drinking water suppliers (e.g., municipal water authorities); however, the data evaluation process for assessing lead results may be used for other drinking water sources. In 1986, Congress banned the use of lead solder containing greater than 0.2 percent lead and restricted the lead content of faucets, pipes and other plumbing materials to 0.8 percent. The Site is on public drinking water and sewer systems. The San Jose Municipal Water System provides drinking water services to the Site.

3.13 Radon

Radon is an invisible, odorless, radioactive gas formed by the decay of uranium in the earth's soil that migrates to the surface through cracks and pore spaces in the soil. Radon gas dissipates in outdoor settings and is present at concentrations considered to be harmless. However, radon gas can accumulate inside buildings and closed spaces, depending on building location, ventilation, and other factors. The EPA recommends considering indoor remedial measures when the radon concentration exceeds 4.0 picoCuries per liter (pCi/L) on an annual average basis.

The Site is located in a designated U.S. EPA Radon Zone 2 where the predicted average radon concentration is between 2.0 pCi/L and 4.0 pCi/L. The EDR report contains radon sampling



results from one site tested in Santa Clara County. The results indicated that the average radon activity conducted in first floor living areas was -1.100 pCi/L, with no results reported for second floor or basement living areas. This level is below the EPA action level.

3.14 Methane Gas/Oil & Gas Wells

The Site is not located in an active oil and gas producing region of California. Versar reviewed the maps and records of the Department of Conservation Division of Oil, Gas, and Geothermal Resources in the 2001 Munger Map Book. Based on the scale of the Munger Map Book, the exact Site could not be determined, but oil wells were not identified in the San Jose area. According to the EDR review of California Division of Oil and Gas (DOG) maps, no oil or gas wells are located within a one mile radius of the Site. Based on this information, oil and gas wells and methane gas are not anticipated to pose an environmental concern for the Site.

4.0 REGULATORY/RECORDS REVIEW

Versar retained EDR to provide a database search of federal and state environmental records. A copy of EDR's report and search radius map is included in Appendix D. The database report was reviewed to note reported releases in the vicinity of the Site that are known to have or are expected to result in an environmental condition which could adversely impact the Site. Reported release sites listed in the regulatory agency database search report were evaluated with respect to the nature and extent of a given release, the distance of the reported release from the Site, and the position of a reported release with respect to known or expected local and/or regional groundwater flow direction (expected to be north-northwesterly, see section 2.4). Generally, reported release sites located within 0.25-mile upgradient, 0.25-mile cross-gradient, or adjacent downgradient are considered to have a potential to impact the Site.

4.1 Federal Regulatory Review

Versar retained EDR to provide a database search of environmental records maintained by the United States government. The scope of the database search by EDR is in accordance with ASTM standard E1527-00. The specific federal databases searched by EDR are listed below:

<u>Database</u>	<u>Type of Records</u>	<u>Radius Searched</u>
NPL	National Priority List (Superfund) sites	1.0-mile
Proposed NPL	Proposed NPL (Superfund) sites	1.0-mile
CERCLIS	Potential hazardous waste sites	0.50-mile
CERC-NFRAP	No Further Action Planned Sites	0.25-mile
CORRACTS	RCRA Corrective Action Reports	1.0-mile
RCRIS-LQG	RCRA Large Quantity Generator	0.25-mile
RCRIS-SQG	RCRA Small Quantity Generator	0.25-mile
RCRIS-TSD	RCRA Treatment, Storage, and Disposal	0.50-mile
ERNS	Emergency Response Notification Sites	Site
CONSENT	Superfund (CERCLA) Consent Decrees	1.0-mile
ROD	Records of Decision	1.0-mile
Delisted NPL	Delisted NPL (Superfund) sites	1.0-mile
FINDS	Facility Index System	Site
HMIRS	Hazardous materials spills incidents	Site
MLTS	Material Licensing Tracking System	Site
MINES	Mines Master Index File	0.25-mile
NPL Liens	Federal Superfund Liens	Site
PADS	PCB Activity Database System	Site
US ENG Controls	Engineering Controls Sites List	0.5-mile
ODI	Open Dump Inventory	0.5-mile
US Brownfields	Brownfield Sites	0.5-mile
Indian Reserv	Indian Reservations	1.0-mile
UMTRA	Uranium mill	0.5-mile
FUDS	Formerly Used Defense Sites	1.0-mile



DOD	Department of Defense Sites	1.0-mile
RAATS	RCRA Violators	Site
TRIS	Toxic Release Inventory System	Site
TSCA	Toxic Substances Control Act	Site
SSTS	Section 7 Tracking System	Site
FFTS	FIFRA/TSCA Tacking System	Site
Coal Gas	Coal Gasification Sites List	1.0-mile

According to the EDR report, the current Site address was not listed on any of the searched federal lists.

Eleven facilities with 0.25-miles of the Site were listed as RCRA-SQGs. According to the EDR report, no violations have been reported at these sites.

Based on Versar's review of the federal databases and application of the evaluation criteria previously described, a low potential exists for future contamination off-site and migration of those contaminants on-Site. Presently, all sites listed on the federal databases are either a significant distance from the Site with respect to groundwater flow direction, or the chemicals of concern or site status are such that recognized environmental conditions which could adversely impact the Site were not identified.

4.2 State Regulatory Review

Versar retained EDR to provide a database search of environmental records maintained by the State of California. The scope of the database search by EDR is in accordance with ASTM standard E1527-00. A copy of EDR's Radius Map report is included in Appendix D. The specific state and local databases searched by EDR are listed below:

<u>Database</u>	<u>Type of Records</u>	<u>Radius Searched</u>
AWP	Annual Workplan Sites	1.0-mile
Cal-Sites	Calsites Database	1.0-mile
CHMIRS	California Hazardous Material Incident Report System	Site
Notify 65	Proposition 65 Records	1.0-mile
Toxic Pits	Toxic Pits Cleanup Act Sites	1.0-mile
SWF/LF	Solid Waste Information System	0.5-mile
WMUDS/SWAT	Waste Management Unit Database	0.5-mile
CA BOND EXP.	Bond Expenditure Plan	1.0-mile
UST	Underground Storage Tanks	0.25-mile
VCP	Voluntary Cleanup Program	0.5-mile
Indian LUST	LUSTs on Indian Land	0.5-mile
Indian UST	USTs on Indian Land	0.25-mile
CA FID UST	Facility Inventory Database	0.25-mile

HIST UST	Hazardous Substance Storage Container Database	0.25-mile
AST	Aboveground Storage Tank Locations	Site
CLEANERS	Cleaner Facilities	0.25-mile
CAWDS	Waste Discharge System	Site
DEED	Deed Restriction Listing	0.5-mile
NFA	No Further Action Determination	0.25-mile
WIP	Well Investigation Program Case List	0.25-mile
EMI	Emissions Inventory Data	Site
REF	Unconfirmed Properties Referred to Another Agency	0.25-mile
SCH	School Property Evaluation Program	0.25-mile
NFE	Properties Needing Further Evaluation	0.25-mile
CA SLIC	Statewide SLIC Cases	0.50-mile
HAZNET	Facility and Manifest Data	Site

According to the EDR report, the Site addresses are not listed on any state databases. The following table identifies release facilities, other than down-gradient facilities, located within 0.25-mile of the Site.

Name/Address	Databases	Location	Status
Bob Lewis Volkswagon 1560 North 1 st Street	LUST, Cortese, Hist UST	Adjacent, west-southwest of the Site (cross-gradient)	Case Closed.
San Jose Honda 1610 North 1 st Street	Hist UST, HAZNET, San Jose HAZNET	Adjacent, west of the Site (cross-gradient)	No violations listed.
Pacific Car Rental 1510 North 1 st Street	LUST, Sweeps UST, Cortese	Approximately 500 feet south-southwest of the Site (cross-gradient)	Case Closed.
Gill Cable TCI 1610 North 4 th Street	LUST, Hist UST, Sweeps UST	Approximately 600 feet east-northeast of the Site (cross-gradient)	Case Closed.
Garden State International Trucks 1505 North 4 th Street	LUST, Cortese, UST, San Jose HAZMAT, Hist UST, EMI, Sweeps UST	Approximately 200 feet east-southeast of the Site (up-gradient)	Case Closed.
Super-7 #18965 1410 North 1 st Street	LUST, Hist UST, Cortese	Approximately 1,000 feet south of the Site (up-gradient)	Case Closed.



Based on Versar's review of the state databases and application of the evaluation criteria previously described, a low potential exists for future contamination off-site and migration of those contaminants on-Site. Presently, all sites listed on the state databases are either a significant distance from the Site with respect to groundwater flow direction, or the chemicals of concern or site status are such that recognized environmental conditions which could adversely impact the Site were not identified.

4.3 EDR Unmapped Sites

The EDR report Orphan Summary identified 28 unmapped sites on the federal and state databases. Based on Versar's Site area reconnaissance and a review of a local street map, no information indicating these facilities could result in environmental liability to the Site was obtained.

4.4 Local Regulatory Review

Versar requested records from multiple local regulatory agencies. Versar's file review requests are also presented in Appendix E.

Santa Clara County Fire Department (SCCFD)

The SCCFD does not maintain files for addresses within the City of San Jose.

San Jose Fire Department (SJFD)

The SJFD has records pertaining to a hazardous materials management plan at the Site when Emcon Associates occupied the Site building. The plan is dated June 27, 1985. Permit records indicate Emcon occupied the building in approximately 1980. Apparently Emcon Associates operated a lab that was located in the southwest corner of the building, where chemicals were stored/used. Chemicals included combustible liquids (oils), corrosives (acids), compressed flammable gases, flammable liquids, flammable solids (wire and sulfur), irritants, non-flammable gases, oxidizers (gas, liquid, and solids), poison liquids and solids, and water-reactive solids and liquids. The purpose of the chemicals is not apparent from the information provided to Versar.

Santa Clara County Environmental Health Department (SCCEHD)

The SCCEHD has leaking UST oversight program files on-line at <http://lustop.sccgov.org>. No files were available for the Site. Versar attempted to access available on-line records for nearby facilities with releases were accessed to determine their potential to impact the Site. The following lists facilities noted within approximately 0.25-miles of the Site. A map of addresses within 0.25-miles of the Site is provided as Figure 4.

Open Cases:

1. Penske Truck Leasing is an open LUST facility located at 1695 North 4th Street, approximately 500 feet north of the Site. The facility also had a separate, prior LUST incident that is now case closed, as of January 15, 1997. The files for this facility showed northerly groundwater flow direction, away from the Site.
2. Coast Counties Truck is an open LUST facility located at 1740 North 4th Street, approximately 750 feet northeast of the Site. The files for this facility showed northerly groundwater flow direction, away from the Site.

Closed Cases:

1. Bob Lewis Volkswagen, located at 1560 North 1st Street, adjacent to the Site to the west, was listed on the web site as case closed, as of October 3, 1995.
2. Monarch Rentals, located at 1717 North 1st Street, approximately 500 feet west of the Site, was listed on the web site as case closed, as of October 1, 1996.
3. George Nolte, located at 1731 North 1st Street, approximately 1,000 feet northwest of the Site, was listed on the web site as case closed, as of November 16, 1990.
4. Billings Chevrolet, located at 1730 North 1st Street, approximately 750 feet north-northwest of the Site, was listed on the web site as case closed, as of December 28, 1995.
5. Pacific Car Rental, located at 1510 North 1st Street, approximately 750 feet south of the Site, was listed on the web site as case closed, as of April 14, 1992.
6. Super-7, located at 1410 North 1st Street, approximately 0.25-miles south of the Site, was listed on the web site as case closed, as of June 29, 2000.
7. Clark Pest Control, located at 1500 North 4th Street, approximately 700 feet east of the Site, was listed on the web site as case closed, as of September 9, 2005.
8. TCI, located at 1610 North 4th Street, approximately 750 feet northeast of the Site, was listed on the web site as case closed, as of January 15, 1997.
9. Garden State International, located at 1505 North 4th Street, approximately 200 feet east-southeast of the Site, was listed on the web site as case closed, as of September 6, 1995.

Santa Clara Valley Water District (SCVWD)

SCVWD informed Versar that UST files had been transferred to the SCCEHD but that solvent case files were available on-line at



http://www.valleywater.org/Water/Water_Quality/Protecting_your_water/_Solvents/_Files/View_Files.cfm. No solvent files were available for the Site.

Regional Water Quality Control Board (RWQCB)

The RWQCB stated that they have no files and that files would be available at the SCCEDH.

Bay Area Air Quality Management District (BAAQMD)

The BAAQMD responded that no files were available for the Site.

Department of Toxic Substances Control (DTSC)

The DTSC responded that no files were available for the Site or other requested nearby addresses.

GeoTracker

Versar reviewed on-line information available at the GeoTracker website, which is a database of active leaking UST sites. No information was available for the Site.

Near the Site, GeoTracker shows the following facilities:

1. An Jan Feed & Pet Supply, located at 1633 South 1st Street, is depicted adjacent to the Site but is physically located approximately 4.5 miles south of the Site. Therefore, it is not expected to impact the Site.
2. The Coast Counties Truck facility, located at 1740 North 4th Street, anticipated to be down-gradient from the Site, is a LUST facility with on-going remediation.
3. The former BP Oil #11235 facility, located at 1271 North 1st Street, is a LUST facility with on-going remediation. The "Third Quarter 2005 Groundwater Monitoring Report" available on the GeoTracker website identified groundwater flow at this facility more than 0.25-miles north, down-gradient from the Site.



5.0 CONCLUSIONS AND RECOMMENDATIONS

Versar performed a Phase I ESA of the Site in conformance with the scope and limitations of the American Society for Testing and Materials Standard Practice E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, and Essex Property Trust's Scope of Services for conducting ESAs. Essex may rely upon the extent, character and conclusions of the report.

Versar conducted a survey for ACBMs on October 3, 2005. Several ACBMs were identified and should be properly abated and disposed of prior to disturbance of these materials, including building demolition activities. Specific results of this survey were provided to Essex under separate cover.

According to historical topographic maps, prior land use included agricultural use as an orchard, suggesting various pesticides may be present in shallow Site soils. Versar recommends a soil screening survey for the presence of these chemicals.

According to the EDR report, the Site address is not listed on state or federal databases. Based on Versar's review of the federal and state databases, all adjacent facilities listed on the databases are either a significant distance from the Site with respect to groundwater flow direction, or the chemicals of concern or site status are such that recognized environmental conditions which could adversely impact the Site were not identified.

Based on the Site visit, discussions with knowledgeable parties, and a review of available information, it is Versar's opinion that there are no recognized environmental conditions at the Site as defined in ASTM Practice E1527-00 at the Site. Based on the information reviewed by Versar and contained in this report, Versar recommends the following:

1. Use of the Site as an environmental consultant chemical laboratory was identified in SJFD files. The Site was occupied by Emcon from approximately 1980 to at least 1985. Numerous small quantity chemicals of all types were used in the laboratory. Versar did not identify documented evidence of a release of these chemicals; however, Versar recommends evaluation of the subsurface adjacent to the sewer lines for evidence of laboratory chemicals release.
2. Use of the Site for dryland agriculture during the 1950s and early 1960s suggests organochlorine pesticides, such as DDT and hexachlorobenzene, may be present in shallow Site soils. In addition, copper and copper-based compounds were often applied to orchards. Versar recommends a soil screening survey for the presence of these chemicals.
3. ACBMs identified and discussed in Versar's separate report must be properly abated and disposed of prior to disturbance of these materials.



6.0 STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as follows:

- The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence of oil or hazardous materials and substances in the environment as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.
- Versar derived the data in this report primarily from visual inspections, examination of records in the public domain, and interviews with individuals with information about the Site. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, conclusions, and recommendations expressed in the report.
- In preparing this report, Versar has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, Versar has not attempted to verify the accuracy or completeness of such information.
- The data reported and the findings, observations, conclusions, and recommendations expressed in the report are limited by the Scope of Services. The Scope of Services was defined by the requests of the Client, and the availability of access to the Site.
- The findings, observations, conclusions, and recommendations expressed by Versar in this report are limited to the information obtained and should not be considered an opinion concerning the compliance of any past or current owner or operator of the Site with any federal, state, or local law or regulation. No warranty or guarantee, whether expressed or implied is made with respect to the data reported or findings, observations, conclusions, and recommendations expressed in this report. Further, such data, findings, observations, conclusions, and recommendations are based solely upon Site conditions in existence at the time of investigation.
- This report has been prepared on behalf of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.

APPENDIX D:

Phase II



November 28, 2005

Mr. Jordan Ritter
Essex Property Trust, Inc.
925 East Meadow Drive
Palo Alto, California 94303

Subject: Phase 2 Environmental Site Assessment
Property at 90 Archer Street
San Jose, California
Versar Project No. 105071.5071.092

Dear Mr. Ritter:

As requested by Essex Property Trust, Inc. (Essex), Versar, Inc. (Versar) has performed a Phase 2 Assessment of the subject property (Site). The Site location is shown in Figure 1, *Site Location Map*. The Phase 2 Environmental Site Assessment (Phase 2 ESA) was conducted in accordance with the scope of work presented to Essex Property Trust and the law firm of Wendel Rosen Black and Dean, dated October 24, 2005.

Based on a draft Phase I report Versar prepared for the site, dated October 18, 2005, potential environmental issues were identified, based on available documentation pertaining to the Site. Versar's investigation identified the potential for contamination to occur beneath the Site from historical Site use.

POTENTIAL CONTAMINANT SOURCES

As presented in Versar's Phase I ESA, according to historical topographic maps, the Site was used as an orchard and for dryland agriculture during the late 1930s and early 1960s suggesting organochlorine pesticides, such as DDT and hexachlorobenzene, may be present in shallow Site soils. In addition, copper and copper-based compounds were often applied to orchards. Versar recommended screening shallow soil for the presence of these chemicals.

The Site was found to have been occupied by Emcon, an environmental consulting firm and testing laboratory, from approximately 1980 to at least 1985. Numerous small quantity chemicals of all types were used in the laboratory. Versar did not identify documented evidence of a release of these chemicals; however, Versar recommended evaluation of the subsurface adjacent to the sewer lines for evidence of laboratory chemicals release.

• SACRAMENTO AREA OFFICE •

7844 MADISON AVENUE, SUITE 167 • FAIR OAKS, CA 95628 • TELEPHONE (916) 962-1612 FAX (916) 962-2678

SITE DESCRIPTION

The approximately 0.66-acre Site is relatively flat and rectangular in shape. The Site is improved with a single, two-story office building, storage shed, asphalt-paved parking and landscaping. The Site building currently contains an electrical closet, two restrooms, a janitorial closet with utility sink, and break room with kitchenette. The building is not served by an elevator. Heating, ventilating and air-conditioning (HVAC) equipment was located on the building's roof.

Constructed in approximately 1980, the Site building is a concrete structure on a slab-on-grade foundation with concrete and glass exteriors, and a flat, built-up, membrane roof. Landscaping, consisting of trees, flowers, and bushes, is located around the perimeter of the Site. Paved parking is located west and south of the building, with approximately 35 of the 40 parking spaces enclosed with a chain-link fence.

OBJECTIVE AND SCOPE OF WORK

The objective of the Phase 2 ESA is to assess whether the Site has been impacted from the release of contaminants from identified potential on-Site sources. To accomplish the objective, Versar collected shallow soil gas and soil samples from borings in potential source areas at the Site. The approximate locations of the borings are shown on Figure 2, Site Layout Map.

Laboratory analysis of the collected soil gas samples was performed using a mobile laboratory equipped and State-certified to perform the required analyses (TEG, California Department of Health Services [DHS] certified mobile laboratory, #2012). Soil gas samples were collected in general accordance with the guidelines developed by the Department of Toxic Substances Control and Los Angeles Regional Water Quality Control Board. Soil samples collected from the Site were analyzed by a fixed-base laboratory, SunStar Labs, ELAP #2250.

Soil gas samples were analyzed for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (US EPA) SW-846 method 8260B, as an indication of potential release. Soil gas sample locations were based on the locations of drains, bends and joints in the underlying sanitary sewer piping beneath the building. Soil samples were collected in five locations, evenly distributed about the Site. The samples were collected using a direct-push type, truck-mounted sampling rig.

FIELD WORK

Soil gas and shallow soil samples were collected on November 9, 2005. Prior to sampling, underground utilities were identified using an underground utilities locator. Underground Service Alert (USA) was also notified, and a dig-ticket obtained at least 48 hours in advance of the work, as required by law. The underground utility locator was also used to locate and map, as

reasonably possible, the sanitary sewer piping, cleanouts, bends and joints beneath the building, and specifically in the area of the former Emcon environmental laboratory.

Three locations for soil gas samples were identified by the sanitary sewer survey, a potential cleanout/drain inlet (SG-1), the junction of this lateral with the main sewer line (SG-2) and adjacent to a tub sink down flow from the junction (SG-3). Soil gas samples were collected from depths of five feet (SG-1), two feet (SG-2) and three feet (SG-3) below ground surface (bgs). For quality assurance, one blank sample, and three samples of varying purge volumes were collected from SG-1. The purge volume obtaining the highest concentrations of VOCs (3 volumes) was used for subsequent soil gas sampling. Soil gas samples were collected by TEG and delivered directly to the on-Site laboratory for analysis; no change in sample custody occurred, so no chain of custody documentation was maintained.

Shallow soil samples were collected from borings B-1 through B-5. At each boring location, one sample was collected from a depth of 0.5 to 1.0 foot bgs, and a second sample collected from a depth of 2.5 to 3.0 feet bgs. Each soil sample was collected within a new butyrate core liner from the depth intervals described. The selected sample interval was cut from the soil-filled core liner interval and capped at each end with Teflon® sheeting and pressure-fitted plastic caps.

Collected soil samples were appropriately labeled for identification purposes, logged onto chain of custody documentation, and stored in a insulated container with ice and transported to the selected state-certified, analytical laboratory. The samples were analyzed for organochlorine pesticides by US EPA Method 8081A, and total copper by US EPA method 6010B.

FINDINGS

Sampling of shallow soil gas at selected locations along the sanitary sewer lines beneath the Site building detected trace concentrations of toluene and xylene isomers. Toluene was detected in each boring, and ranging from 0.10 to 0.14 micrograms per liter ($\mu\text{g/l}$). Meta and para xylenes were detected in samples SG-1 and SG-2, ranging in concentration from 0.12 to 0.13 $\mu\text{g/l}$.

Copper was detected in shallow soil samples collected from the Site at concentrations ranging from 22 to 48 milligrams per kilogram (mg/kg). Three organochlorine pesticides were detected in shallow soil samples collected from the Site, 4,4'-DDD, 4,4'-DDE and 4,4'-DDT. 4,4'-DDD concentrations ranged from non-detect (<5.0 micrograms per kilogram [$\mu\text{g/kg}$]) to 97 $\mu\text{g/kg}$. 4,4'-DDE concentrations ranged from non-detect to 2,100 $\mu\text{g/kg}$. 4,4'-DDT concentrations ranged from non-detect to 22 $\mu\text{g/kg}$. The highest concentrations of organochlorine pesticides were detected in boring B-1, at 1.0 foot bgs, followed by the underlying sample collected at 2.5 feet bgs. No organochlorine pesticides were detected in the sample collected from Boring B-4 at 2.5 feet bgs.

The analytical data is attached, and includes the associated chain of custody document.

DISCUSSION

Concentrations of constituents of concern were detected in soil gas and shallow soil samples collected from the Site on November 9, 2005. Trace concentrations of the aromatic hydrocarbons, toluene and two xylene isomers, were detected in shallow soil gas. The detected concentrations were less than Environmental Screening Levels (ESLs) for soil gas protective of human and ecological health, promulgated by the San Francisco Bay - Regional Water Quality Control Board (SF-RWQCB), in February 2005.

Copper was detected in Site soil at concentrations ranging from 22 to 48 mg/kg. Copper is a naturally occurring element common to soil and rock and can be expected to occur, in the San Francisco Bay area, at concentrations ranging from 30 to 50 mg/kg (US Geological Survey, 1984).

One or all of the organochlorine pesticides, 4,4'-DDE, 4,4'-DDD and 4,4'-DDT were detected in each collected soil sample, except one. The highest detected concentrations, 2,100 and 1,700 µg/kg 4,4'-DDE were detected at 1.0 and 2.5 feet bgs, respectively, in boring B-1, located in the northwest corner of the Site at the Site entrance off of Archer Street. These two concentrations exceed the SF-RWQCB ESL, Table A, for shallow soil. These concentrations also meet or exceed the US EPA Preliminary Remediation Goal (PRG), updated in October 2004, of 1,700 µg/kg for residential soil. The concentrations of 4,4'-DDE in other borings, and concentrations of 4,4'-DDD and 4,4'-DDT, are an order of magnitude or more less than the corresponding ESL and PRG.

CONCLUSIONS AND RECOMMENDATIONS

Concentrations of VOCs, copper and three organochlorine pesticides have been detected in soil gas and in shallow soil at the Site. The detected concentrations of VOCs in soil gas are less than human and ecological health-based screening levels, and do not warrant further investigation. The presence of copper can not be directly related to Site use, and occurs at naturally occurring, background concentrations. Concentrations of 4,4'-DDE detected at 1.0 and 2.5 feet bgs in the northwest portion of the Site are greater than human and ecological health-based screening levels. Concentrations of this compound and the related compounds 4,4'-DDD and 4,4'-DDT elsewhere on Site are well below ESLs and PRGs.

Based on the findings of our investigations and assessment, Versar recommends removal of shallow soil containing concentrations of 4,4'-DDE greater than SF-RWQCB ESLs and disposal off-Site at an appropriate facility.

Thank you for this opportunity to provide our professional technical services to Essex Property Trust. If there are questions or concerns regarding this report, please contact me at (916) 863-9323 and berger@versar.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Berger', with a long horizontal flourish extending to the right.

Tim Berger, P.G., R.E.A.
Program Manager
Versar - Southwest Region

Attachments - Figures
 Laboratory Analytical Reports and Chain of Custody Documentation
 References

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APPENDIX E:

Noise Study



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May 22, 2006
Project No. 38-030

Mr. Jeff Panek
Essex Property Trust
925 East Meadow Drive
Palo Alto, CA 94303

Subject: Noise Assessment Study for the Planned "90 Archer Street" Apartments
Archer Street, San Jose

Dear Mr. Panek:

This report presents the results of a noise assessment study for the planned "90 Archer Street" apartments along Archer Street between North First Street and Kerley Drive in San Jose, as shown on the Floor Plans, Ref. (a). The noise exposures at the site were evaluated against the standards of the City of San Jose Noise Element, Ref. (b), and the State of California Code of Regulations, Title 24, Ref. (c). The analysis of the on-site sound level measurements indicates that the existing noise environment is due primarily to vehicular traffic sources on North First Street, Archer Street and aircraft operations at Mineta/San Jose International Airport (SJIA). Noise from the Light Rail Trains is part of the North First Street traffic data. The results of the study indicate that noise exposure excesses occur and mitigation measures will be required. As the site is outside of the 65 dB aircraft noise contour, the standards of the Santa Clara County Airport Land Use Commission (ALUC) are not in effect.

Sections I and II of this report contain a summary of our findings and recommendations, respectively. Subsequent sections contain the site, traffic, aircraft and project descriptions, analyses, and evaluations. Attached hereto are Appendices A, B, and C, which include the list of references, descriptions of the applicable standards, definitions of the terminology, descriptions of the acoustical instrumentation used for the field survey, ventilation requirements, general building shell controls, and the on-site noise measurement data and calculation tables.

I. Summary of Findings

The noise assessment results presented in the findings were evaluated against the standards of the City of San Jose Noise Element, which utilizes the Day-Night Level (DNL) descriptor. The Noise Element standards specify an exterior limit of 60 decibels (dB) DNL for residential land use impacted by transportation related noise sources. A limit of 45 dB DNL is specified for interior living spaces. The City of San Jose Noise Element also contains wording that states that some development sites in the Downtown Core Area, in the vicinity of San Jose International Airport and along major roadways are exposed to noise levels that may not be able to meet the noise standards in the time frame of the General Plan.

The Title 24 standards also use the DNL descriptor and specify that when the exterior noise exposures exceed 60 dB DNL at planned dwelling units an acoustical analysis must be performed to limit interior noise exposures to 45 dB DNL or less.

The Title 24 standards also specify minimum noise insulation ratings for common partitions separating different dwelling units and dwelling units from common spaces. The standards specify that common walls and floor/ceiling assemblies must have a design Sound Transmission Class (STC) rating of 50 or higher. In addition, common floor/ceiling assemblies must have a design Impact Insulation Class (IIC) rating of 50 or higher. As design details for the interior partitions of the project were not available at the time of this study, an evaluation of the interior partitions has not been made.

The noise levels shown below are without the application of mitigation measures and represent the noise environment for the undeveloped site.

A. Exterior Noise Levels

- The exterior noise exposure at the most impacted planned patios, balconies, fifth floor decks and building setback from North First Street (320 ft. from the centerline) and SJIA is 61 dB DNL. Of this 61 dB, 56 dB is due to North First Street traffic, 57 dB is due to Archer Street traffic and 56 dB is due to aircraft. Under future conditions, North First Street traffic noise is expected to increase to 58 dB DNL, Archer Street traffic is expected to increase to 58 dB DNL and the aircraft noise exposure is expected to remain at 56 dB DNL. The total future exterior noise exposure will be up to 62 dB DNL. Thus, the noise exposures will be up to 2 dB in excess of the City of San Jose Noise Element standards and the Title 24 criterion.
- Noise from the individual sources of noise, including Kerley Drive traffic, do not impact the site on an individual basis.

B. Interior Noise Exposures

- The interior noise exposure in the most impacted living spaces of units closest to North First Street, Archer Street and SJIA will be 46 and 47 dB DNL under existing and future conditions, respectively. Thus, the noise exposures will be up to 2 dB in excess of the City of San Jose Noise Element and Title 24 standards.

The noise exposures at the site exceed the 60 dB DNL exterior noise criterion of Title 24, therefore, as acoustical analysis is required. This report is intended to satisfy that requirement.

As shown above, exterior and interior noise level excesses will occur and mitigation measures will be required to comply with the City of San Jose Noise Element and Title 24 standards. The recommended measures are described in Section II, below.

II. Recommendations

Reducing the noise exposures in the patios, balconies and fifth floor decks will not be feasible as one of the primary noise source is aircraft which is an overhead source and noise control barriers for the exterior living areas cannot shield aircraft noise. As exterior noise exposures of 62 dB DNL have been considered acceptable at other multi-family projects in San Jose, the noise exposures in the exterior living areas should be considered acceptable as well.

Mitigation measures for the patios, balconies and fifth floor decks are not recommended.

B. Interior Noise Controls

To achieve compliance with the 45 dB DNL standards of the City of San Jose Noise Element and Title 24, the following noise control measures will be required. In addition, general construction measures affecting the building shell are also recommended, as described in Appendix B.

- Maintain closed at all times all windows and glass doors of living spaces with a north or west orientation and within 137 ft. of the centerline of Archer Street. These windows and glass doors may have any type of glass. Provide some type of mechanical ventilation.

All other windows of the development, including bathroom windows, may have any type of glass and may kept open as desired with the exception of bathrooms that are in integral part of a living space and not separated by a closeable door.

When windows are kept closed for noise control, some form of mechanical ventilation which brings in fresh air from the outside of the unit must be provided. Ventilation requirements specified in the Uniform Building Code are shown in Appendix B. All windows in impacted living spaces must have high quality, heavy duty frames and must seal air-tight to the outside environment when in the closed position. The window frames in impacted living spaces must be caulked to the wall opening around their entire perimeter with an acoustical sealant to prevent sound infiltration.

The implementation of the above recommended measures will reduce excess noise exposures to achieve compliance with the interior standards of the City of San Jose Noise Element and Title 24.

III. Site, Traffic and Project Descriptions

The planned development site is located along Archer Street between North First Street and Kerley Drive in San Jose. The site is level and at-grade with the roadways and presently contains a vacant commercial building. Surrounding land uses include a Homestead Studio Suites facility adjacent to the west with its parking lot adjacent to the south, a commercial building and the Idealease facility across Kerley Drive to the east and the Archstone Apartments across Archer Street to the north.

The on-site noise environment is controlled primarily by traffic sources on North First Street and Archer Street. North First Street carries an Average Daily Traffic (ADT) of 19,000 vehicles, as reported by the City of San Jose, Ref. (d). Traffic volume data for Archer Street were not available. The existing noise contour for aircraft operations at Mineta/San Jose International Airport were extrapolated from contours shown in the 1996 SJIA Master Plan, Ref. (e), and on the 2005 Fourth Quarter Noise Contour Map published by the airport, Ref (f). The contour maps indicate that the site is located approximately at the 55 dB CNEL (Community Noise Equivalent Level) noise contour. Note that the CNEL and the DNL are approximately equivalent.